INDIANA UNIVERSITY

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University Graduate School

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University Graduate School

Administration

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Overview

The University Graduate School administers degree programs on six campuses of Indiana University: Bloomington, Fort Wayne, Kokomo, Indianapolis, South Bend, and Southeast at New Albany. At Bloomington there are certificate programs in the College of Arts and Sciences and in the School of Informatics and master's programs in the College of Arts and Sciences. There are Ph.D. programs and/or Ph.D. minors in the College of Arts and Sciences, the Jacobs School of Music, the Kelley School of Business, the School of Education, the School of Informatics, the School of Law, the School of Library and Information Science, the School of Optometry, and the School of Public and Environmental Affairs.

At Indianapolis the programs administered by the Indiana University Graduate School include certificates in the School of Health and Rehabilitation Sciences, the School of Liberal Arts, the School of Medicine, and the School of Public and Environmental Affairs. Master's programs in the School of Liberal Arts, Health and Rehabilitation Sciences , and the School of Science. Ph.D. programs and/or Ph.D. minor progams are available in the School of Informatics, School of Nursing and the School of Social Work. The School of Dentistry, the School of Liberal Arts, School of Medicine, and the School of Public and Environmental Affairs offer both master's and Ph.D. or Ph.D. minor programs. Fort Wayne and Kokomo offer master's programs in their Schools of Arts and Sciences. Masters of Liberal Studies are available at South Bend and at Southeast.

Mission Statement

The mission of The University Graduate School is to promote and support excellence in graduate education for individual students, faculty, departments, and the university as a whole.

In accomplishing this mission, The University Graduate School values excellence, integrity, collaboration, efficiency, innovation, and inclusiveness in all that it does. These values are central to the school's role in encouraging a creative environment for scholarship, research, teaching and learning. The University Graduate School is a recognized leader in developing new concepts and best practices for graduate education. It assists departments in recruiting, supporting, retaining, and graduating outstanding scholars. Through its connections with national higher education organizations, it serves as a resource in forging the future directions of graduate education.

History and Organization

In 1908, upon the insistence of faculty members of the College of Arts and Sciences, the university placed its graduate courses into a newly formed unit, the Graduate School, and named biology professor Carl Eigenmann its first dean (1908-27). Four years later, Indiana University gave its first Ph.D. degree, although Master of Arts degrees had been conferred in cursu upon graduates of Indiana University in the nineteenth century. Today, the Graduate School awards approximately 300 Ph.D.'s and some 500 master's degrees annually. In addition to the Ph.D., the Graduate School at Indiana University has sole jurisdiction over the Master of Arts, the Master of Science, the Master of Arts for Teachers, the Master of Laws, and the Master of Fine Arts degrees wherever they are offered in the university system. The professional schools have jurisdiction over other postbaccalaureate degrees and, of course, provide the instruction for Graduate School degrees in their disciplines. As a university-wide office, the Graduate School grants degrees at five of the university's eight campuses: Bloomington, Fort Wayne, Indianapolis, South Bend, and Southeast.

In the Graduate School's early years, during the presidency of William Lowe Bryan, the university concentrated on undergraduate instruction. When Herman B Wells became president in 1938, graduate education at Indiana began to thrive under the deanship of Fernandes Payne, another biologist (1927-47). With the strong support of President Wells and under the guidance of Dean Payne's successors, English professor and folklorist Stith Thompson (1947-50) and botanist Ralph Cleland (1950-58), the Graduate School grew rapidly during the post-World War II years. Twenty-five graduate fellowships were created during the war years.

John W. Ashton, the second English professor to occupy the Graduate School deanship (1958-65), had served as dean of the College of Arts and Sciences before taking over the new Graduate School offices in Kirkwood Hall. During his tenure in the College and in the Graduate School, Dean Ashton gave strong support to interdisciplinary programs and emerging disciplines such as linguistics, comparative literature, East European studies, folklore, School of Letters, and Uralic and Altaic studies. By 1960, Bernard Berelson's book *Graduate Education in the United States* ranked Indiana University twelfth of 92 institutions of higher education. Allan Carter's *Assessment of Quality in Graduate Education* (1966) also reflected the increased stature of the university's graduate programs. In that work, four Graduate School programs ranked among the top ten of their kind in the nation, and twenty programs emerged among the top twenty.

The appointment of Harrison Shull, a chemist (1965-72), marked an outstanding increase in the research and graduate development activities of the Graduate School. When Dean Shull left the Graduate School to become the vice chancellor for research and development, he took many of these activities with him, leaving the Graduate School to be concerned primarily with graduate education. As the university underwent reorganization under the leadership of President John W. Ryan, two temporary deans, Harry Yamaguchi, a psychologist (1972-77), and James Holland, the third biologist to head the Graduate School (1977-78), presided over an office that, without a

research and development component, was able to focus its attention on the quality of graduate education.

From 1978 until 1987, the historian Leo F. Solt was dean. Under his leadership, the Graduate School became a university-wide entity, encouraging excellence in graduate education throughout the state of Indiana by systematically reviewing all existing programs and by implementing new graduate programs on the Indianapolis and South Bend campuses, as well as on the Bloomington campus. Fellowship funds were increased, and more minority students were recruited; the Graduate School was computerized to improve record keeping and monitoring of students; additional steps were taken to improve the quality of Ph.D. dissertations; and participation by graduate students in the administrative and policy making activity of the Graduate School was encouraged.

Thomas Noblitt, a music historian, was acting dean from 1987 until 1989. During his tenure, new graduate programs were approved for the Northwest and Fort Wayne campuses, and offerings at Bloomington and Indianapolis were expanded. In August 1989, George Walker, a physicist, became associate vice president (and later vice president) for research and dean of the University Graduate School, thus reuniting two offices that had been separated for nearly 20 years. Under his direction, the University Graduate School was reorganized to allow departments and schools to assume a larger part of the responsibility for the monitoring of graduate students' progress toward their degrees. Increased emphasis on financial support for graduate education has led to substantial additions to the fellowship budget, new initiatives were undertaken to encourage research on all campuses of the university, and the Graduate Council was significantly expanded. Dean Walker has also established a Preparing Future Faculty Program to prepare graduate students for the full range of professional responsibilities they will face.

In 2003, the Office of Research and the University Graduate School were again separated, and John Slattery, a pharmacologist from the University of Washington, was recruited to head the again independent University Graduate School. Unfortunately he was lured back by the University of Washington, and in the fall of 2005, Sherry Queener (who had been associate dean at Indianapolis) and Eugene R. Kintgen (who had been associate dean at Bloomington) were named acting co-deans. James C. Wimbush, a professor of business administration, was appointed dean of the University Graduate School in 2006.

In 1951, the faculty elected nine of their number to a Graduate Council. Today, the Graduate Council has 35 voting members elected by the University Graduate School faculty. That faculty of about 2,200 members comes from all campuses of the university. Beginning in 1980, a University Graduate School faculty committee has selected new members of the graduate faculty upon nomination by departmental or school administrators, subject to the approval of the dean of the University Graduate School and, in the case of full members, the Board of Trustees. This process changed in 2005. Currently, all tenured or tenure-eligible faculty are automatically appointed as members of the Graduate Faculty. An additional endorsement to direct doctoral dissertations can be obtained by nomination by the appropriate doctoral program chair or program faculty, subject to approval of the dean of the University Graduate School. The names of all IU faculty members who hold appointments as members of the Graduate Faculty are listed in this bulletin under the names of the program(s) with which they are associated. An asterisk (*) denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.

Members of the University Graduate School faculty ultimately determine standards of admission, set the general requirements for degrees, pass upon the specific requirements of programs, approve courses for graduate credit, and certify candidates for degrees. These functions are executed by the Graduate Council and the dean and administrative staff. More specifically, the University Graduate School faculty serve on advisory and research committees for doctoral students, direct master's theses and doctoral dissertations, and elect members of the Graduate Council.

The Graduate Council, which represents faculty in all graduate units, meets monthly during the academic year. In addition to the functions delegated to it by the faculty of the University Graduate School, it serves as an executive advisory body to the dean and administrative staff on policy matters. It receives the reports of the school's standing faculty committees; it acts upon recommendations for changes in admission, the curriculum, degree requirements, and procedures for the administration of student programs; it receives and acts upon the recommendations of ad hoc committees appointed by the dean; it gives advice on ways to improve the quality of graduate work; and it seeks ways to coordinate the programs of the University Graduate School with other graduate programs in the university.

In addition, the deans and staff of the University Graduate School monitor indicators of the quality of individual graduate programs, and (through the recorders) the quality of master's and doctoral degrees granted. Mentoring and Preparing Future Faculty programs, both within the departments and centralized in the University Graduate School, ensure that these students are integrated into their academic programs and prepared for the full range of professional responsibilities they will encounter in their careers.

The Graduate and Professional Student Organization is the representative body for graduate students enrolled on the Bloomington campus. Likewise, the Graduate Student Organization represents graduate students enrolled in programs on the Indianapolis campus. Both organizations work with the University Graduate School to advocate for the interests of graduate and professional students.

Contact Information

University Graduate School

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IUPUI Graduate Office

Graduate Office
Union Building 207
Indiana University–Purdue University Indianapolis
Indianapolis, IN 46202
(317) 274-1577
gradoff@iupui.edu

Admission

Undergraduate Requirements

The University Graduate School will consider applications from students holding baccalaureate degrees from Indiana University or from other accredited four-year collegiate institutions. The University Graduate School may admit students who do not meet stated admission criteria provided that the deficiencies amount to no more than one year's work. The dean will determine the condition of admission in such cases. If more than a year's work is deficient, students should apply to the University Graduate School for admission to the Continuing Nondegree Program. Students from unaccredited institutions may be admitted as special students for one semester; if their records are then satisfactory and their department, program, or school recommends them, they will be given full standing. Ordinarily, a B (3.0) average in the undergraduate major is required for admission to the University Graduate School.

Distance/Distributed Education

The University Graduate School recognizes the role in contemporary curricula of modern technologies that enhance learning in both traditional formats featuring primarily face-to-face interaction and in non-traditional formats where students and faculty engage each other primarily via electronic means. In considering course work for admission purposes or for transfer of credit into a degree program, the Graduate School expects programs to evaluate course work and to apply the same criteria for quality to both traditional and distance formats. Course work must be from an accredited four-year collegiate institution to be considered for admission purposes, or must otherwise comply with the requirements for non-accredited institutions (see prior section)

Indiana University Baccalaureate Degree Candidates

Candidates for baccalaureate degrees at Indiana University may apply for conditional admission to the University Graduate School and may enroll for graduate credit for that portion of their program not required for completion of the baccalaureate degree, provided that:

1. They are within one semester of meeting baccalaureate degree requirements. (If the baccalaureate is not completed within that semester, graduate credit earned may not be counted toward an advanced degree).
2. The total course load does not exceed that ordinarily taken by a full-time graduate student.
3. The courses taken for graduate credit are authorized to carry such credit. (In certain instances graduate credit is allowed for undergraduate courses.)

Application for Admission

To assure that course credit will be eligible to count toward an intended graduate degree, prospective graduate students, including graduates of Indiana University, must make formal application and be admitted to a department, program, or academic school, or must be registered as a continuing nondegree student before taking courses for graduate credit. Most programs of the University Graduate School consider applications for admission and financial aid that are completed by the following dates: January 15 for the fall semester, September 1 for the spring semester, and January 1 for the summer. If a program uses other deadlines, the applicant will be informed by the staff of the program. Many graduate programs consider applications submitted after a deadline as long as all available spaces for students have not been filled by highly qualified applicants. Inquiries about late applications for admission or financial aid should be addressed to the program of the student's intended major.

Electronic applications are the preferred form of application at IU Bloomington. If needed, paper application forms are available in the office of the University Graduate School, Kirkwood Hall 114, Indiana University, Bloomington, IN 47405, in the IUPUI Graduate Office, IUPUI, Union Building 207, 620 Union Street, Indianapolis, IN 46202, and in departmental offices.

For further information, consult www.gradapp.indiana.edu. All applications must be accompanied by one complete transcript of previous college and university work and should be submitted directly to the department in which the student wishes to work. Indiana University graduates should request the registrar's office to send unofficial copies of their transcripts to that department.

By action of the Trustees of Indiana University, a nonrefundable application fee of $55 is required of all applicants. An application fee of $55 (2010-2011) is required for all applicants applying to Indiana University Graduate School programs on the IUB campus and $50 on the IUPUI campus. All Graduate Nondegree students on the Indianapolis campus must pay a $50 (2010-2011) application fee as well. At IU Bloomington, Continuing Nondegree Program students are not assessed an application fee, but a $25 processing fee is assessed each semester in which they enroll.

Admission (except for Continuing Nondegree students) is made to a particular department for a specific degree, and no student shall be permitted to work toward a degree without first having been admitted to do so. A flexible entry procedure for basic science programs at Indianapolis allows Ph.D. students up to one year to identify a research laboratory and degree program. Students desiring to change departments should fill out Transfer of Department Forms, which may be obtained in the offices of individual departments or schools (e.g., the School of Education, the College of Arts and Sciences). Requests for change of degree status must be submitted by the department and approved by the dean.

Following the notice of admission to the University Graduate School, an applicant normally has two calendar years in which to enroll. Supplementary transcripts of any additional academic work undertaken during that period are required, and a department may request additional letters of recommendation. Should the updated material prove unsatisfactory, the admission may be cancelled. If the applicant fails to enroll within two years, a completely new application is required.

Graduate Record Examination

Applicants may be required to take the Graduate Record Examination General Test, Subject Test, or both (see departmental requirements). Information concerning these examinations may be obtained online at www.ets.org. Further information is available in the office of the University Graduate School (IUB) or at the Graduate Office (IUPUI).

Applicants who need their score report before November, 2011, must take the General Test before August 1, 2011. Score reports for tests taken between August and October, 2011, will become available November, 2011.

International Students

There are special application procedures for those who are not citizens of the United States or who have had their previous schooling outside the United States. At IU Bloomington, international students can apply online at www.gradapp.indiana.edu or obtain the International Paper Packet from the Office of Admissions at Bloomington (300 N. Jordan Ave; [812] 855-4306; e-mail intladm@indiana.edu) or the Office of International Affairs at IUPUI (902 W. New York St., ES 2126; [317] 274-7000; e-mail intlaff@iupui.edu; the international application may be downloaded from www.iupui.edu/~oia/). Because of the extra procedures required in evaluating foreign credentials, the application fee for international students is $60 (IUB and IUPUI).

Once enrolled, international students who wish to change their programs of study must first obtain the approval of the Office of International Services. After such approval is granted, application for formal change of status may be made to the University Graduate School according to the same procedures governing United States citizens.

International students must enroll in at least 8 credit hours each fall and spring semester in order to meet visa requirements. Any exceptions to this regulation must be approved in advance by the Office of International Services.

Since the language of instruction at Indiana University is English, proficiency in reading, writing, speaking, and understanding English is essential. Applicants whose native language is not English should submit proof of such proficiency by the time they apply for admission. Normally this is done by taking the Test of English as a Foreign Language (TOEFL). Results of this test should be submitted as part of the application for admission. The TOEFL examination is given six times a year in the United States and many foreign countries. Further information may be obtained at American consulates or by writing to TOEFL, Box 899, Princeton, NJ 08541, U.S.A. If it is not possible to take the TOEFL, applicants should obtain a statement by a responsible official, ordinarily a United States consular official, attesting that they read, write, speak, and understand the English language well enough to pursue, at an American university, a program leading to an advanced degree in their chosen field. Such a statement should be submitted with the application for admission.

Prior to registration for classes, all new students whose native language is not English are required to take an English Language Proficiency Test administered by the Indiana University Center for English Language Training (CELT) at Bloomington, and by the ESL program and the Office of International Affairs at Indianapolis. If the results of this test indicate that a student needs additional work in English as a second language, appropriate recommendations will be made to the student's academic advisors. This requirement has been established in recognition of the vital importance of language competency to the student's academic success. Prospective students whose native language is not English and who have been offered positions as associate instructors are required to pass additional tests in English, since success as a teacher at Indiana University is dependent upon one's ability to communicate in the English language. Information regarding these examinations may be obtained directly from the individual academic departments at IU Bloomington or from the Graduate Office at IUPUI.

Nondegree Students

Special Students

Students who have not been admitted to a degree program but who intend to study primarily in one department may be admitted by that department with the approval of the dean as special students. They must apply to a department just as degree students do and should indicate their desired status.

Continuing Nondegree Students

The holder of a baccalaureate degree who wishes to study on a nondegree basis without necessarily concentrating in a single department may be admitted to the University Graduate School as a continuing nondegree student. Such students may not accumulate more than 18 credit hours in a single subject area, and may enroll only in those courses for which they can obtain specific permission to register, which takes into consideration the academic background of the individual and course enrollment limitations. In addition to Indiana University tuition and mandatory fees, a program processing fee of $25 is assessed each semester. For details of admission and further information, students should consult The University Graduate School at Bloomington (Kirkwood Hall 114, [812] 856-4503, nondegr@indiana.edu, www.indiana.edu/~grdschl/continuing-non-degree-program.php,) or the Graduate Nondegree Program at Indianapolis (620 Union Drive, Room 207, [317] 274-1577, www.iupui.edu/~gradoff/gnd/. A student initially admitted as a continuing nondegree student who later wishes to obtain a graduate degree must make formal application and be admitted to a departmental degree program. The department may then recommend to the dean that credit earned as a continuing nondegree student be applied to degree requirements. Students should be aware that certain departments and schools specifically prohibit work taken under continuing nondegree status from counting toward a degree after a student has been admitted to a degree program.

Policies & Procedures

This site provides an overview of the academic regulations and procedures of the University Graduate School and Indiana University.

Degree Conferral

The University Graduate School will recommend the candidate to the Board of Trustees for the degree only upon completion of all the requirements stated previously. Degrees are awarded on the last day of each month of the year.

For all students seeking a master's degree, an application for the degree must be filed with the University Graduate School at least 60 days before the date anticipated for degree conferral. All degree requirements must be completed at least 30 days before the date of expected degree conferral, including submission to the University Graduate School of the bound copies of the master's thesis (if required for degree).

For doctoral students, submission to the University Graduate School of the copies of the completed dissertation and abstract as described under Submission of the Dissertation constitutes an application for conferral of the Ph.D. degree. Doctoral students are reminded (a) that the 30-day announcement deadline prior to the defense of the dissertation and the 30-day deadline prior to degree conferral are nonoverlapping time periods; and (b) that research committees frequently require revisions and corrections after the defense of the dissertation and that these revisions must be made before the dissertation is ready for binding and submission to the University Graduate School.

Commencement

All graduate students are encouraged to participate in the Commencement ceremonies. The solemn yet colorful academic pageantry can provide a fitting culmination to a period of intense study and work. At IUB, all Ph.D. candidates are now hooded by their professors. Procedures for participating in Commencement may be obtained from the University Graduate School for IUB students and from the Graduate Office for IUPUI students.

Full-Time Study

Ordinarily, students shall be considered full time if they are registered for 8 hours of credit (fall, spring, and summer terms) and their programs of study meet with the approval of the departments. Courses taken as an auditor may not be counted in the definition of "full-time study"; however, courses taken to remove undergraduate deficiencies for admission may be counted.

Students holding appointments as associate instructors, graduate assistants, or research assistants must ordinarily be registered for 6 credit hours during each full semester.

For academic purposes, the University Graduate School will consider as full-time certain students who are exceptions to the above definitions: M.A. and M.S. candidates whose completed courses and deferred thesis credits total 30 hours; M.F.A. candidates whose completed courses and deferred thesis credits total 60 hours; and Ph.D. students whose completed courses and deferred dissertation credits total 90 hours, providing they are working on theses or dissertations for the completion of the degree. Such students, however, must enroll in at least one hour of graduate thesis (for master's students) or dissertation (for doctoral students) credit each semester. For master's candidates, such enrollment will be limited to the five-year period allowed for completion of the master's degree; this enrollment for doctoral candidates will be limited to the seven-year period after passing the qualifying examination. Students who have already accumulated 90 or more hours of graduate credit and who hold university-administered student appointments as associate instructors, graduate assistants, or research assistants amounting to at least 0.375 FTE (15 hours per week workload) will be required to enroll for at least 6 hours of credit during each semester they continue to hold an appointment. Such hours will be charged at the allocated fee rate.

Students may take no more than 16 hours of credit in any semester or more than a total of 16 credit hours in all the summer sessions in any one year without permission of their graduate advisor. Students who are employed are advised to take into account the demands that such activities make on their time and to reduce their course loads accordingly.

Grading Policies

Grades

Grade points are assigned at Indiana University according to the following scale, and grade point averages are computed taking into account any plus or minus accompanying a letter grade.

A = 4.0
A- = 3.7
B+ = 3.3
B = 3.0
B- = 2.7
C+ = 2.3
C = 2.0
C- = 1.7
D+ = 1.3
D = 1.0
D- = 0.7
F = 0

Ordinarily a minimum of a B (3.0) average in graduate work is required for continuance in graduate study, and for all graduate degrees. Courses completed with grades below C (2.0) are not counted toward degree requirements, but such grades will be counted in calculating a student's grade point average. Some departments may require an average grade in graduate courses higher than 3.0, while others may count no courses completed with grades below 3.0 toward degree requirements (see departmental entries). No work may be transferred from another institution unless the grade is a B (3.0) or higher.

The dean may review a grade record at any time and may place a student on academic probation if the record justifies such action. When the grade point average of a student falls below 3.0 or the student is not making sufficient progress toward the degree, the dean will notify the student that he or she has been placed on probation. Unless the student brings this record up to a 3.0 grade point average or begins making satisfactory progress in the next semester of enrollment, the student will not ordinarily be allowed to continue in the University Graduate School.

Pass/Fail Option

Students in good standing (i.e., with a grade point average of 3.0 or better) who have completed graduate course work sufficient for a master's degree may, with the written

consent of their graduate advisor or of their advisory committee, enroll in courses outside their major and minor areas on a pass/fail basis under conditions stated in a memorandum available from the University Graduate School office. Such courses may not be used to fulfill departmental language or research-skill requirements. Enrollment under this option will be made at the beginning of the semester and may not be changed after the date fixed for dropping and adding of courses.

Incomplete Grades

The grade of Incomplete may be given only when the completed portion of a student's work is of passing quality. It is the responsibility of the student who has incurred the grade of Incomplete in any course to satisfy the requirements of that course within one calendar year from the date on which the Incomplete is recorded. The student is expected to finish all necessary work in time for the instructor to assign a regular grade before the expiration of this time period. If the student is unable to do so because of circumstances clearly beyond the student's control, it is the student's responsibility to notify the instructor of the course, the graduate advisor, and the dean within the year of such circumstances and to request an extension of time. According to university policy, every overdue Incomplete will be changed to F after one calendar year. Both the student and the instructor shall be notified of this change in grade. This change will be made unless the dean has received notice of a regular grade duly assigned before that time or has approved a request for an extension of time. A change of the grade F will be considered only if the request for change is accompanied by an explanation of the circumstances involved. Students may not register in a course in which they have a grade of Incomplete.

These regulations do not apply to research and reading courses in which completion of the course work is not usually required at the end of the semester. Such courses are indicated in departmental listings by the sign "*"; incomplete work in those courses will be denoted by R (deferred grade).

Withdrawal from Course Work

Withdrawals prior to the "last day to drop a course with an automatic W" (see official calendar for each semester) are automatically marked W. According to university regulations, withdrawal after this date is permitted only with the approval of the dean of the student's school for urgent reasons related to the student's health or equivalent distress. In all such cases, the student must submit a request for late withdrawal to the advisor or to the departmental chairperson. This request must be supported by the instructor of the course, the graduate advisor, and the departmental chairperson and then be forwarded to the dean with an accompanying statement outlining the reasons for the request. If the dean approves the request, the student's mark in the course shall be W if the work completed up to the point of withdrawal is passing; otherwise a grade of F shall be recorded. Failure to complete a course without an authorized withdrawal will result in the grade of F.

Graduate Credit

Graduate Credit—General

Only courses listed in this bulletin or specifically allowed by it may be counted toward the requirements for a degree offered by the University Graduate School. These courses are ordinarily numbered at the 500 level or above. In certain cases, courses at the 300 and 400 level have been specifically approved for graduate credit; all such courses are listed in this bulletin. Normally, these courses require a higher level of performance and significantly more work (such as an increased number of readings, additional papers, extra class sessions, oral class presentations) for the graduate students than for the undergraduates. Each instructor should identify the graduate students enrolled in the course during the first week of classes and should outline the nature of the work expected of them at that time. In certain other unusual instances the dean may approve, upon recommendation and justification by the student's advisory committee, other 300- or 400-level courses for graduate credit, typically to count toward requirements in the student's outside minor. Such approval should be requested before the course is taken.

In many departments there are strict limitations on the number of 300- and 400-level courses that may be counted toward advanced degree requirements; see departmental notices for details. For descriptions of 300- and 400-level courses, see the College of Arts and Sciences Bulletin or the School of Liberal Arts Bulletin. Not all courses listed in this bulletin are offered every year and on every campus. Inquiries concerning the availability or suitability of a particular course should be directed to the appropriate departmental chairperson.

The number of hours of credit given a course is indicated in parentheses following the course title. The abbreviation "P" refers to the course prerequisite or prerequisites. Similarly, the abbreviation "R" indicates recommended prerequisites. Courses eligible for a deferred grade are marked by the sign "**".

Courses taken while an undergraduate and counted toward the requirements of a baccalaureate degree may not also be counted toward a graduate degree. With only three exceptions, courses counted toward the requirements for one advanced degree may not be counted toward requirements for another degree at the same level.

In the case of the M.F.A., course work completed as part of an M.A., M.S., or M.A.T. degree may, with the approval of the student's department, be counted toward the M.F.A., provided it otherwise meets the conditions stated in this bulletin.

In the case of the Dual Master's Program, certain reductions are allowed in the total number of hours required if the two degrees had been taken separately. The Dual Master's Program involves two degrees at the master's level; the degrees may be under the jurisdiction of the University Graduate School or of another school (e.g., Journalism, Library and Information Science, Public and Environmental Affairs). For further information, see below (under Requirements for Master's Degrees) and the departmental entries for Central Eurasian Studies, Comparative Literature, East Asian Languages and Cultures, Economics, Environmental Programs, Fine

Arts, Folklore and Ethnomusicology, Geography, History, History and Philosophy of Science, Journalism, Latin American and Caribbean Studies, Library and Information Science, Music, Nursing Science, Philanthropic Studies, Russian and East European Institute, and West European Studies.

Work counted toward a master's degree may also be counted toward the Ph.D. if it has been approved by the student's advisory committee and if it otherwise meets the conditions stated in this bulletin, including the rules governing the transfer of credit from other institutions.

Transfer of Credit

Upon recommendation of the department and with the approval of the dean, work taken for graduate credit at other institutions may be transferred in partial fulfillment of degree requirements. No course may be transferred from another institution unless the grade is B or higher and unless the course was completed within the time limit prescribed (see "Graduate Credit—General" section below). The following restrictions apply:

1. Candidates for the M.A., M.S., LL.M., or M.A.T. degree may offer up to 8 hours of graduate credit from other institutions.
2. Candidates for the M.A.T. degree who are graduates of Indiana University may offer up to 12 hours of graduate credit from other institutions.
3. Candidates for the M.F.A. degree may offer up to 20 hours of graduate credit from other institutions.
4. Candidates for the Ph.D. degree may offer up to 30 hours of graduate credit from other institutions.
5. It must be emphasized that the transfer of credit is not an automatic occurrence. Students must obtain the written consent of both their departmental advisor and the dean before credit earned at other institutions will be added to their records.

Revalidation

Normally, a course may not be counted toward degree requirements if it has been completed more than (a) five years prior to the awarding of the degree for master's students or, (b) seven years prior to the passing of the qualifying examination for Ph.D. students. The graduate advisor, after consultation with the advisory committee, may, however, recommend to the dean that course work taken prior to the above deadlines be revalidated if it can be demonstrated that the knowledge contained in the course(s) remains current. Currency of knowledge may be demonstrated by such things as: (a) passing an examination specifically on the material covered by the course[1]; (b) passing a more advanced course in the same subject area; (c) passing a comprehensive examination in which the student demonstrates substantial knowledge of the content of the course; (d) teaching a comparable course; or (e) publishing scholarly research demonstrating substantial knowledge of the content and fundamental principles of the course. Each course for which consideration for revalidation is being requested should be justified separately.

[1]If the qualifying examination is used for this purpose, the number of courses to be revalidated by this method should be limited to two in order to avoid compromising the integrity of the qualifying examination process.

Residence Requirements

All candidates for graduate degrees (with the exceptions outlined below) must complete at least 30 credit hours of graduate work while enrolled on campuses of Indiana University. Of these hours, at least one semester or two summer sessions of full-time work must be taken in University Graduate School degree-granting units on the Bloomington, Fort Wayne, Indianapolis, South Bend, or Southeast campuses. Candidates for the Ph.D. degree must spend two consecutive semesters during one academic year on the Bloomington or Indianapolis campus.

Work Done at More Than One Indiana University Campus

Students who plan to earn a degree through a degree-granting unit on one Indiana University campus and who plan to take a substantial number of hours on one or more of the other Indiana University campuses in partial fulfillment of degree requirements should have their programs of study approved in advance by the degree-granting unit. The residency requirement must be met on the campus where the degree-granting unit is located.

Revalidation of Courses

Normally, a course may not be counted toward degree requirements if it has been completed more than (a) five years prior to the awarding of the degree for master's students or, (b) seven years prior to the passing of the qualifying examination for Ph.D. students. The graduate advisor, after consultation with the advisory committee, may, however, recommend to the dean that course work taken prior to the above deadlines be revalidated if it can be demonstrated that the knowledge contained in the course(s) remains current. Currency of knowledge may be demonstrated by such things as: (a) passing an examination specifically on the material covered by the course2; (b) passing a more advanced course in the same subject area; (c) passing a comprehensive examination in which the student demonstrates substantial knowledge of the content of the course; (d) teaching a comparable course; or (e) publishing scholarly research demonstrating substantial knowledge of the content and fundamental principles of the course. Each course for which consideration for revalidation is being requested should be justified separately.

Graduate Credit

Graduate Credit—General

Only courses listed in this bulletin or specifically allowed by it may be counted toward the requirements for a degree offered by the University Graduate School. These courses are ordinarily numbered at the 500 level or above. In certain cases, courses at the 300 and 400 level have been specifically approved for graduate credit; all such courses are listed in this bulletin. Normally, these courses require a higher level of performance and significantly more work (such as an increased number of readings, additional papers, extra class sessions, oral class presentations) for the graduate students than for the undergraduates. Each instructor should identify the graduate students enrolled in the course during the first week of classes and should outline the nature of the work expected of them at that time. In certain other unusual instances the dean may approve, upon recommendation and justification by the student's

advisory committee, other 300- or 400-level courses for graduate credit, typically to count toward requirements in the student's outside minor. Such approval should be requested before the course is taken.

In many departments there are strict limitations on the number of 300- and 400-level courses that may be counted toward advanced degree requirements; see departmental notices for details. For descriptions of 300- and 400-level courses, see the College of Arts and Sciences Bulletin or the School of Liberal Arts Bulletin.

Not all courses listed in this bulletin are offered every year and on every campus. Inquiries concerning the availability or suitability of a particular course should be directed to the appropriate departmental chairperson.

The number of hours of credit given a course is indicated in parentheses following the course title. The abbreviation "P" refers to the course prerequisite or prerequisites. Similarly, the abbreviation "R" indicates recommended prerequisites. Courses eligible for a deferred grade are marked by the sign "**".

Courses taken while an undergraduate and counted toward the requirements of a baccalaureate degree may not also be counted toward a graduate degree. With only three exceptions, courses counted toward the requirements for one advanced degree may not be counted toward requirements for another degree at the same level.

In the case of the M.F.A., course work completed as part of an M.A., M.S., or M.A.T. degree may, with the approval of the student's department, be counted toward the M.F.A., provided it otherwise meets the conditions stated in this bulletin.

In the case of the Dual Master's Program, certain reductions are allowed in the total number of hours required if the two degrees had been taken separately. The Dual Master's Program involves two degrees at the master's level; the degrees may be under the jurisdiction of the University Graduate School or of another school (e.g., Journalism, Library and Information Science, Public and Environmental Affairs). For further information, see below (under Requirements for Master's Degrees) and the departmental entries for Central Eurasian Studies, Comparative Literature, East Asian Languages and Cultures, Economics, Environmental Programs, Fine Arts, Folklore and Ethnomusicology, Geography, History, History and Philosophy of Science, Journalism, Latin American and Caribbean Studies, Library and Information Science, Music, Nursing Science, Philanthropic Studies, Russian and East European Institute, and West European Studies.

Work counted toward a master's degree may also be counted toward the Ph.D. if it has been approved by the student's advisory committee and if it otherwise meets the conditions stated in this bulletin, including the rules governing the transfer of credit from other institutions.

Transfer of Credit

Upon recommendation of the department and with the approval of the dean, work taken for graduate credit at other institutions may be transferred in partial fulfillment of degree requirements. No course may be transferred from another institution unless the grade is B or higher and unless the course was completed within the time limit prescribed (see "Graduate Credit—General" section below). The following restrictions apply:

1. Candidates for the M.A., M.S., LL.M., or M.A.T. degree may offer up to 8 hours of graduate credit from other institutions.
2. Candidates for the M.A.T. degree who are graduates of Indiana University may offer up to 12 hours of graduate credit from other institutions.
3. Candidates for the M.F.A. degree may offer up to 20 hours of graduate credit from other institutions.
4. Candidates for the Ph.D. degree may offer up to 30 hours of graduate credit from other institutions.

It must be emphasized that the transfer of credit is not an automatic occurrence. Students must obtain the written consent of both their departmental advisor and the dean before credit earned at other institutions will be added to their records.

Transfer from One Department to Another

Matriculated students wishing to transfer from one department within the University Graduate School to another should first consult their graduate advisors or advisory committees and the graduate advisor of the new department about the wisdom of the change. International students desiring to make such a change must also obtain the approval of the Office of International Services. Application to the new department may then be made using the Application for Transfer of Department within the University Graduate School form, available in individual departments and schools. Students expecting to receive a degree from the department they are transferring from should be sure that the effective date of the transfer falls after the degree will be conferred, since degrees can be conferred only in the department in which the student is enrolled.

General Requirements for Advanced Degrees

Guidelines for Requirements

The following statements regarding degree requirements outline the minima that are acceptable. The student must meet not only the general requirements of the University Graduate School but also the specific requirements of the individual department(s). Requirements are given in this bulletin only for degrees awarded by the University Graduate School. Professional graduate degrees are also available at Indiana University (such as the Master of Business Administration, Master of Science in Education, and Doctor of Music degrees). These professional degrees are administered by the respective schools; information regarding these degrees and the requirements for each may be found in the bulletins of the individual schools.

The University Graduate School recommends that those who intend to continue graduate work toward the Ph.D. degree elect one of the traditional master's degree programs requiring a thesis or a foreign language or both.

Academic Integrity

Students are expected to adhere to the highest ethical standards in all their course work and research. Individuals violating that code of conduct are subject to disciplinary action; such breaches could lead to expulsion of the student from Indiana University or to recision of a degree already granted. To acquaint students more fully with the range of issues relating to academic integrity, the University Graduate School has prepared a document entitled Integrity in Graduate Study, which deals with plagiarism, fraud, and conflicts of interest, among other topics. Copies of that document may be obtained from departmental offices, from the office of the University Graduate School, in Kirkwood Hall 111 (IUB), or from the Graduate Office in the Union Building, Room 207 (IUPUI). Every student should be familiar with its contents.

About the Requirements for Master's Degrees

The number of credit hours required by the University Graduate School for master's degrees varies according to the individual degree (see below for details). However, with the exception of the Dual Master's Program, the requirements for all master's degrees must be completed within five consecutive years.

With the exception of the Master of Arts for Teachers (M.A.T.), a thesis or reading knowledge of a foreign language is normally required for a master's degree (see departmental entries for exceptions). If a thesis is not required, departments are encouraged to substitute some other type of special project that is creative, exploratory, or experimental in nature. In lieu of the traditional thesis, for example, the department might require seminar papers, presentations, publishable reports, artistic performances, or exhibitions. The thesis or alternative project should be equivalent to no fewer than 3 nor more than 9 hours of graduate credit; such credit should be granted under an appropriate departmental course or independent study number. Departures from traditional thesis requirements prescribed by the individual departments must be approved by both the department and the dean. If a thesis is submitted, the student must file the original and one copy (both bound) with the University Graduate School. These copies will later be placed in the University Library. At least one additional copy may be required by thedepartment. The title page must bear the statement: "Submitted to the faculty of the University Graduate School in partial fulfillment of the requirements for the degree Master of _____ in the Department1 of _____ , Indiana University." At least three members of the faculty shall normally participate in the approval of the thesis and must sign an acceptance page which appears after the title page. The statement, "Accepted by the faculty of the University Graduate School, Indiana University, in partial fulfillment of the requirements for the degree Master of _____ ," should precede the signatures on the acceptance page. Each copy of the thesis is to be accompanied by the student's vita sheet inserted at the end. For details regarding the typing and duplication of theses, see Preparation of Theses and Dissertations.

Three or more faculty members should participate in certification of the student's fulfillment of the requirements for a master's degree. Their participation may take any of several forms, such as administering a final or comprehensive examination, or evaluating the candidate's thesis or alternative project. In instances where shortcomings are apparent, the student may be required to complete additional course work or assignments.

If the master's degree is used to meet part of the requirements to convert a provisional or standard teaching certificate into a professional certificate (which is no longer a life license), the student's degree program must include at least 18 credit hours of graduate work in the major or minor field or both.

Master's Degrees

Master of Arts

Thirty (30) credit hours are required for the M.A. (some departments require more than 30), all of which may be taken in a single department; at least 20 of these credit hours must be earned in the major field. A minimum of 9 credit hours of course work or at least three courses in the major field (excluding thesis) must be numbered 500 or above.

Master of Science

General requirements for the M.S. are identical with those for the M.A. (see above).2

Master of Fine Arts

The M.F.A. degree, which is offered in the Departments of English, Fine Arts, and Theatre and Drama, requires a minimum of 60 credit hours.

Master of Arts for Teachers

In order to be admitted to this program, students must hold a baccalaureate degree from a regionally accredited institution. The degree should include sufficient hours in each discipline in which students plan to work to enable them to elect courses carrying graduate credit (see departmental entries for details).

Thirty-six (36) credit hours beyond the baccalaureate degree are required, at least 20 of which must be in the major teaching field, with the remainder allocated either to additional work in the major or to one or more minors. Certain interdepartmental programs have specific minor requirements (for details, see the individual program statements). Each candidate must possess a teacher's certificate (from Indiana or another state in the United States) at the time the degree is conferred, with the exception of international students, who must be certified by their departments. Because in some cases licensing requirements and M.A.T. course requirements may overlap, the teaching certificate will be issued and the degree will be conferred at the same time. Graduates who do not hold certificates (teaching licenses) should have their credentials evaluated for teaching certification purposes by the graduate licensing advisor in the School of Education.

Upon recommendation of the department and approval by the dean, a maximum of 6 credit hours of undergraduate courses taken after completion of the baccalaureate degree may be applied toward the M.A.T. degree. M.A.T. degrees are available in most areas represented in the high school curriculum. Interested students should consult the chairperson of the department or the division concerned to discuss programs of study.

Dual Master's Program

Students who are concurrently enrolled in two departments may qualify for two master's degrees under a provision that allows credit earned to satisfy the major requirements of one department to count as elective credit in a second department. Dual master's degrees require a minimum of 50 credits, with at least 21 credits earned in each of the programs. To be eligible for this program, a student must be formally admitted by both departments and by the University Graduate School. All requirements of both degrees must be met, including passing any departmental examinations and satisfying foreign-language/research-skill requirements. If both departments require a thesis, the student may write a single thesis that meets the requirements of both fields. The thesis committee will comprise an equal number of representatives of both departments, and the thesis credit will be split between the two. All course work for the program must be completed within a period of six years.

Preparing Theses and Dissertations

Theses and dissertations must be typed or laser-printed. The body of the text must be one-and-a-half- or double-spaced; margins must be at least one-and-a-half inches on the left and one inch on the top, right, and bottom. Page numbers must be consecutive throughout, with Arabic numerals used for the body of the work and small or lowercase Roman numerals for the front matter. Script fonts (ex. Monotype Corsica) and italicizing large sections of text are not allowed for the main body of your text, although italics may be used appropriately.

The paper must be watermarked, 100-percent cotton bond paper of 20 or 24 lbs., in the format of 8 1/2 by 11 inch sheets. If photographs or detailed graphics are part of the work, make certain they are crisp and clear when printed. It is acceptable to use special laser or photo paper for the pages(s) in the dissertation containing images in order to achieve the best possible quality.

Theses and dissertations must be written in English unless you and your department/committee have decided otherwise. For more information, see the University Graduate School's online guide Preparing Theses and Dissertations, www.indiana.edu/~/preparing-theses-and-dissertations.php.

Ph.D. Degree

The Ph.D. degree requires completion of at least 90 credit hours of an advanced course of study. The degree is awarded in recognition of a candidate's command of a broad field of knowledge and accomplishment in that field through an original contribution of meaningful knowledge and ideas.

- Major Subject and Minor Subjects
- Double Majoring
- Combined Degree Programs
- Assignment to an Advisory Committee
- Qualifying Examinations
- Admission to Candidacy Status
- Continuing Enrollment
- Dissertation

Major Subject and Minor Subjects

Major Subject

The student will select a major subject from the departments and programs listed in this bulletin. The major department or program is responsible for monitoring the student's progress toward the degree and for making recommendations to the University Graduate School regarding the nomination to candidacy, the appointment of a research committee, the defense of the dissertation, and the conferring of the degree.

Minor Subjects

The student will select at least one minor subject. A minor provides additional breadth and depth to the individual's program. It must be taken outside the major department from among those areas of study listed in this bulletin or in a specifically approved inter- or intradepartmental area (see departmental entries).3 The determination of the minimum requirements and examination procedure (if any) for the minor is entirely at the discretion of the minor department or program. In certain cases, special interdepartmental minors (12 or more credit hours of work in two or more departments) or minors not specifically listed in this bulletin may be approved by the dean upon recommendation of the student's advisory committee, provided such approval is requested prior to pursuit of any of the proposed courses of study. Examination procedures (if any) or other requirements (for example, stipulation of the minimum grades acceptable) should also be specified in the proposal to the dean.

Double Majoring

Students may pursue two majors in two departments simultaneously, if so recommended by each department and approved by the dean. Two general requirements pertain to double majors: (1) there must be a substantive relationship between the two major fields, particularly with respect to the topic of the student's dissertation; and (2) all degree requirements for each major must be fulfilled, including the passing of two sets of qualifying examinations. In some instances it may be possible to count the same work toward requirements in both departments (e.g., a specific foreign language acceptable in both programs). The exact courses of study and examinations required are to be determined by members of the research committee from each of the majors. Any area of substantial overlap in the two courses of study or in the examinations is to be negotiated by the committee as a whole and approved by the dean.

There must be at least four faculty members on both the advisory and research committees for a double major, with two from each of the majors. If other minor fields are involved, a representative must also be present from each of these.

A total of 90 credit hours is required for the Ph.D. degree with a double major. While judicious program planning may permit completion of some double majors within the 90 credit hours, other students may accrue additional hours due to the programs of study required for each major. In recognition of such a possibility, students in the program will be allowed one additional year before they must take the qualifying examinations. For a complete set

of rules relating to double majors, students should consult the University Graduate School office.

Combined Degree Programs

The School of Medicine, the School of Dentistry, the School of Law, and the University Graduate School offer selected students an opportunity to pursue the M.S. or Ph.D. degrees, concurrently or sequentially, with a coordinated and flexible program leading also to the M.D., D.D.S., or J.D. degree. Combined degree programs are available in anatomy, biochemistry, dental science, medical biophysics, medical genetics, medical neurobiology, microbiology and immunology, pathology, pharmacology, physiology, and toxicology. At Bloomington, the combined degree is available not only in these basic medical, biological, and physical sciences but also in the humanities and social studies. The combined degree program is designed to meet the student's particular objectives and needs and is planned by the student and an advisory committee of faculty representing the School of Medicine or the School of Dentistry and the respective department or program.

Entry into a combined degree program requires approval of the School of Medicine, the School of Dentistry, the School of Law, and the University Graduate School. Two applications are necessary: one to the Indiana University School of Medicine, of Dentistry, or of law, and another to the Indiana University Graduate School via the sponsoring department or program.

Indiana University School of Medicine has established an Indiana Medical Scientist Program for fellowship and tuition support of students in the combined M.D./Ph.D. program. A faculty committee nominates students for the program based on commitment to a career as a physician scientist, research experience, undergraduate grade point average, and MCAT scores. A flexible entry program allows students up to one year to identify a research laboratory and degree program. Information can be obtained from the Graduate Division of the School of Medicine.

Completion of the program entails meeting all requirements for both degrees. Many nonclinical courses of the curriculum of the School of Medicine satisfy course requirements for both degrees, and credit given for graduate study may fulfill some of the School of Medicine requirements. The combined degrees may thus be acquired in less time than would be required if both were taken separately.

As well as fulfilling requirements for the M.D. program, a minimum of 30 credit hours of graduate study is required for the combined M.S./M.D. degree. Of these, 10 credit hours may be transferred from exclusively School of Medicine courses with the approval of the student's advisory committee and the University Graduate School. Similarly, a minimum of 90 credit hours of graduate study is required for the combined Ph.D./M.D. degree. A maximum of 30 credit hours of exclusively School of Medicine courses may count toward the Ph.D. degree.

On the Bloomington campus there is a combined M.A. in Telecommunications and J.D. in Law; see the entry in Telecommunications for details.

Within the University Graduate School, combined degrees are available in American Studies and Cognitive Science. Students in these programs must be accepted both by a Ph.D.-granting department and by either the American Studies or the Cognitive Science Program, and must satisfy the requirements for both chosen fields. Requirements are the same as those for the Ph.D. degree with a double major (see above).

Advisory Committee

The student's major department or program shall assign the student to an advisory committee no later than one year after admission to the Ph.D. program. The advisory committee must include at least two members from the major area and one from another. At least two members of the advisory committee must be members of the graduate faculty. The names of faculty members nominated to serve on the advisory committee shall be forwarded to the student's school or college for approval no later than one year after the student has been admitted to the Ph.D. program. The advisory committee shall approve the student's program of study and counsel the student until the passing of the qualifying examination.

Qualifying Examinations

This examination, given at such time and in such manner as the major department shall determine, shall be written, although additional oral examinations may be required. The qualifying examination shall cover the major subjects and may, at the discretion of the minor department(s) or the interdepartmental committee, cover the minor subjects as well.

Normally, the qualifying examination is taken after the student has completed all course work for the Ph.D. All such work offered in partial fulfillment of degree requirements must either have been completed within seven consecutive calendar years of the passing of the qualifying examination or be revalidated according to procedures outlined in this bulletin (see Revalidation).4 Reading proficiency required in one or more foreign languages must also have been demonstrated, whether by course work or examination, no more than seven years before the passing of the qualifying examination. In the case of an examination of more than one part, the date of passing is regarded as the date of passing the final portion of the examination, typically the oral examination. Students who fail the qualifying examination are normally allowed to retake it only once. The qualifying examination must be passed at least eight months before the date the degree is awarded.

Admission to Candidacy Status

Following the passing of the qualifying examination and the completion of all course work and departmental language or research-skill requirements (if any), the student's advisory committee will submit a Nomination to Candidacy Form to the University Graduate School. Upon approval of the dean, the student will be admitted to candidacy and awarded a Certificate of Candidacy. The date of successful completion of the qualifying examinations (not the date of final approval of candidacy) is the one used in determining the seven-year periods for currency of courses (see Qualifying Examination) and completion of the dissertation (see Submission of the Dissertation).

Continuing Enrollment

Students who have passed the qualifying examination must enroll each semester (excluding summer sessions) for any remaining required course work or dissertation credits. Once such students have accumulated 90 credit hours in completed course work and deferred dissertation credits, they must enroll for a minimum of 1 hour of graduate credit each semester until the degree is completed. Failure to meet this requirement will automatically terminate the student's enrollment in the degree program. Students who have completed 90 credit hours and all requirements for the Ph.D. are eligible to enroll in G901 for a flat fee of $150 per semester. Enrollment in G901 is limited to a total of six semesters. (For students not on campus, enrollment may be completed by mail.)

A candidate who will be graduated in June, July, or August of any year must enroll in a minimum of 1 hour of credit as described above in either the current or the immediately preceding summer session.

Dissertation

Dissertation

The culmination of the Ph.D. program is the writing of the dissertation, which is required of all doctoral students. The dissertation must be an original contribution to knowledge and of high scholarly merit. The candidate's research must reveal critical ability and powers of imagination and synthesis. The dissertation is written under the supervision of a research director and a research committee, as described below. Although work published by the student may be incorporated into the dissertation, a collection of unrelated published papers, alone, is not acceptable. There must be a logical connection between all components of the dissertation, and these must be integrated in a rational and coherent fashion. It is the responsibility of the student's research committee to determine the kind and amount of published materials which may be included in a dissertation.

Research Committee

To initiate research for the dissertation, the student chooses a professor who will agree to direct the dissertation. The department shall then recommend to the dean for approval a research committee composed of the chosen director (who will also normally serve as chairperson of the committee), two or more additional faculty members from the major department, and a representative of each minor. The committee should be selected from the members of the graduate faculty who are best qualified to assist the student in conducting the research for the dissertation. In the event that the dissertation research does not involve the area(s) of the minor(s) whether outside or inside the department the major department may request, with the consent of the minor-field representative(s), the substitution of a representative or of representatives from some other field(s) more appropriate to the topic of the dissertation. The committee has the responsibility of supervising the research, reading the dissertation, and conducting the final examination.

All chairpersons of research committees and directors of research must be members of the graduate faculty with the endorsement to direct doctoral dissertations. If, however, special expertise in an area is held by a member of the graduate faculty who does not have the endorsement, the departmental chairperson may request that the dean approve such an individual as research committee chairperson or director of the dissertation research.

All members of a research committee must be members of the graduate faculty. At least half of the members of the committee must be members of the graduate faculty with the endorsement to direct doctoral dissertations; others may be regular members.

After consultation with and approval by the dissertation director and research committee, the student will submit to the University Graduate School a one- or two-page prospectus of the dissertation research. If the proposed research involves human subjects, animals, biohazards, or radiation, approval from the appropriate university committee must also be obtained. The membership of the research committee and the dissertation prospectus must be approved by the University Graduate School at least six months before the defense of the dissertation.

Defense of the Dissertation

When the dissertation has been completed, the student should submit an unbound copy to each member of the research committee as the initial step in scheduling the defense of the dissertation. All members of the research committee should read the dissertation in its entirety before attending the defense. At this stage both the student and the faculty members must extend certain courtesies to each other. It is the responsibility of the student to give faculty members sufficient time to read the dissertation without making unreasonable requests of them based upon University Graduate School time limitations, immediate job possibilities, contract renewal, or some other reason. Similarly, a faculty member should not keep a student's work for inordinate periods of time because of the press of other duties. Once a faculty member assumes membership on a research committee, it becomes another part of his or her teaching assignment, comparable to conducting regularly scheduled classes.

After the committee members have read the dissertation, there should be direct communication (either in writing or orally) between the research committee chairperson and the other committee members about its readiness for defense. Readiness for defense, however, is not tantamount to acceptance of the dissertation; it means that the committee is ready to make a decision. The decision to hold a doctoral defense, moreover, is not entirely up to the research committee. If a student insists upon the right to a defense before the committee believes the dissertation is ready, that student does have the right to due process (i.e., to an oral defense) but exercises it at some risk.

If the decision to proceed with the defense of the dissertation is made against the judgment of one or more members of the committee, or if one or more members of the committee disapprove of parts of or all of the dissertation, the committee member(s) should not resign from the committee in order to avoid frustration or collegial confrontation. The University Graduate School urges that such committee members, after ample communication with both the student and the chairperson, remain on the committee and thus prevent the nomination of a committee that might eventually accept

what could be unsatisfactory work. Such a committee member could agree that a dissertation is ready for defense but should not be passed (or should not be passed without substantial modification). There will, of course, be situations in which the membership of research committees should or must be changed (e.g., turnover of faculty), but changes because of modifications in the dissertation topic or some equally plausible reason should be made early in the writing of the dissertation.

Thirty days prior to the scheduled defense of the dissertation, the candidate must submit to the University Graduate School a one-page announcement of the final examination. This announcement must follow a format available in the University Graduate School's Preparing Theses and Dissertations. The announcement contains, among other things, a summary of the dissertation (not less than 150 words) which is informative and contains a brief statement of the principal results and conclusions. The announcement must bear the signature of the research committee chairperson. If the candidate has published any scholarly articles relevant to the topic of the dissertation, bibliographical references should be included in the summary. A copy of such announcements will be sent to any member of the graduate faculty upon request.

Once the final examination has been scheduled, the announced time and place of the defense must not be changed without the approval of the dean. Any member of the graduate faculty who wishes to attend the final examination is encouraged to do so; it is requested, however, that the faculty member notify the chairperson of the research committee in advance so that space can be arranged. With the approval of the research committee and the consent of the candidate, other graduate students may attend the defense of the dissertation; normally such students will act as observers, not as participants.

At the end of the oral examination, the research committee must vote on the outcome of the examination. Four options are available to the committee: (1) pass, (2) conditional pass, (3) deferred decision, and (4) failure. If the decision to pass is unanimous, the dissertation is approved once it is received by the University Graduate School along with an acceptance page signed by the members of the research committee. If the decision is not unanimous, majority and minority reports should be submitted to the dean who, within 10 working days, will investigate and consult with the research committee. Upon completion of the dean's investigation and consultation, another meeting of the research committee will be held, and if a majority votes to pass, the dissertation is approved when it is received by the University Graduate School with an acceptance page signed by a majority of the members of the research committee.

The student must have received acceptance of his or her dissertation and must submit a copy to the University Graduate School within seven years after passing the qualifying examination. Failure to meet this requirement will result in the termination of candidacy and of the student's enrollment in the degree program. Any student whose candidacy lapses will be required to apply to the University Graduate School for reinstatement before further work toward the degree may be done formally. To be reinstated to candidacy in the University Graduate School, the student must: (1) obtain the permission of the departmental chairperson; (2) fulfill the departmental requirements in effect at the time of the application for reinstatement; (3) pass the current Ph.D. qualifying examination or its equivalent (defined in advance)5; and (4) request reinstatement to candidacy from the dean. Such reinstatement, if granted, will be valid for a period of three years, during which time the candidate must enroll each semester for a minimum of one credit.

Submission of the Dissertation

Following acceptance by the research committee, the dissertation is submitted to the University Graduate School. For complete guideline information, see the University Graduate School's online Preparing Theses and Dissertations (a printable version is also available online) — http://www.indiana.edu/~grdschl/preparing-theses-and-dissertations.php.

Each dissertation must include a title page bearing the statement: "Submitted to the faculty of the University Graduate School in partial fulfillment of the requirements for the degree Doctor of Philosophy in the Department of _____, Indiana University." The date of this page should be the month and year when all requirements have been satisfied; this is not necessarily the month in which you defend. Following the title page is the acceptance page with the statement: "Accepted by the faculty of the University Graduate School, Indiana University, in partial fulfillment of the requirements for the degree Doctor of Philosophy." The acceptance page must be signed by members of the research committee. See the online guide for the complete order for the front matter.

The candidate must also submit an abstract of no more than 350 words for the dissertation that has been approved and signed by the research committee. The abstract will appear in Dissertation Abstracts International published by University Microfilms, Ann Arbor, Michigan. If the original abstract is not in English and an English translation has been made, submit both the English and non-English language abstracts.

Copyright may be secured; contact the University Graduate School for details. The cost for copyrighting is currently $55 (for 2010-2011).

Many Indiana University departments now allow electronic submission of the dissertation. Contact the department for more information.

Traditional Submission: Once approved and finalized, one unbound copy of the dissertation, in a box suitable for mailing, and one or two bound copies must be filed with the University Graduate School. One of the bound copies is sent to the library and one bound copy is sent to the department, depending on departmental policy. The unbound copy of the dissertation will be microfilmed and will be available for purchase from PQIL (ProQuest Information and Learning Company) by all those who request it. The required fee for publishing the abstract and for microfilming the dissertation is currently $65 (for 2010-2011).

Electronic Submission: Once approved and finalized, the dissertation should be submitted electronically in the form of a .pdf file to ProQuest. The dissertation will be transferred to the library and several dissertation databases by ProQuest. A microfilm version will also be made available for purchase from PQIL (ProQuest Information and Learning Company) by all those who

request it. Effective September 27, 2010, there is no longer a fee to publish the abstract and microfilm the dissertation.

Foreign Language & Research Skills

Individual departments determine whether foreign languages or research skills or both will be required. Where such requirements exist, students must select the specific language(s) or research skill(s) from those approved by the major department and listed in its statement of departmental requirements. Another language demonstrably useful in the student's research program may be substituted upon special recommendation of the major department and approval by the dean. A student whose native language is not English may, with the permission of the major department, either (1) demonstrate the required proficiency in that native language, or (2) use English to meet foreign language requirements. Proficiency in English may be demonstrated by taking the Test of English as a Foreign Language (TOEFL) examination. (For further information regarding the TOEFL examination, see the section International Students.)

Reading proficiency in a foreign language is normally established in one of three ways:

1. By achieving an appropriate score on an examination administered on the Bloomington campus by the respective language department. Students should contact the language department for details.
2. By completing, with a grade of B (3.0) or better, the reading course _492 (e.g., F492 for French, G492 for German). Students may register for the first course in the sequence, _491, to prepare for _492; those who feel they have sufficient preparation may register for _492, though they should consult the language advisor first.
3. By receiving, in the cases of Catalan, French, German, Italian, Portuguese, Russian, or Spanish, a grade of B (3.0) or better in a literature or civilization course at Indiana University numbered 300 or higher (exclusive of individual readings and correspondence courses) in which the reading is done in the foreign language.3

For details, consult the respective language departments.

In certain departments, reading proficiency may be demonstrated by presenting an original translation for approval by a faculty examiner designated by the appropriate language department.

Proficiency in Depth

In certain departments, students have the option of substituting proficiency in depth in one language for reading proficiency in two languages. Proficiency in depth in a language is defined as the ability to read rapidly without the aid of a dictionary and the ability to speak, understand, and write in a manner comparable to that expected of students who have successfully completed fourth-year composition and conversation courses. For information about demonstrating proficiency in depth, students should consult the graduate examiner in the foreign language department concerned.

Courses taken to fulfill research-skill requirements may, at the discretion of the student's major department, be counted for graduate credit in a student's program of study provided such courses are listed in this bulletin as carrying graduate credit. Each course must be passed with a grade of B (3.0) or higher to satisfy the proficiency requirement.

Financial Aid

There are many forms of financial aid for graduate students awarded or facilitated by the University Graduate School and Indiana University. A number of options are included in this site.

Assistantships and Instructorships

Associate Instructorships, Graduate Assistantships, and Research Assistantships

A large number of associate instructorships, graduate assistantships, and research assistantships are available in departments and schools offering degrees through the University Graduate School. Some of these positions are accompanied by fee remissions which defray a large percentage of tuition and fees. Application for such positions should be made to the department or school in which the student wishes to work. Early application is advisable.

Resident Assistantships

Positions are available on the Bloomington campus and at IUPUI for single graduate students to serve as resident assistants in the residence halls. Selection of graduate students for these positions is based on the applicant's academic record, previous background and experience, potential for work with undergraduate students, and personal qualifications necessary to relate successfully to other people. The resident assistant serves as an advisor to a living unit of 50 students in one of the university residence centers. These positions provide room, board, and a cash stipend; course work is limited to a maximum of 12 credit hours each semester. For further IUB information, contact the director, Department of Residence Life, 801 N. Jordan Avenue, Bloomington, IN 47405, telephone (812) 855-1764. For further IUPUI information, contact the director, Office of Housing and Residence Life, 1226 W. Michigan Street, Indianapolis, IN 46202-5180, telephone (317) 274-7200.

Fellowships

A number of fellowships are available to students enrolled in the University Graduate School. Among them are University Graduate School fellowships, fee scholarships, and various privately and federally funded awards. Students should apply for these fellowships directly to the major department. In all cases, early application is advisable. It should be noted that all such award holders are required to devote full time to their studies.

Indiana University also offers several recruitment fellowship and support programs for students underrepresented in graduate education (ethnic minority, first generation and/or low income college students and women in the sciences). These include the Graduate Scholars Fellowship, Adam W. Herbert Graduate Fellowship, Women in Science Graduate Fellowship, Ronald E. McNair Graduate Fellowship, and the Educational Opportunity Fellowship. In some cases

students must meet certain criteria in order to be eligible for consideration for these awards.

To be considered for any of these awards, a student should submit an IU application form for admission and financial aid to the relevant graduate program at IUB by mid-January of the year preceding enrollment. Further information for IUB students can be obtained from the University Graduate School Fellowship Coordinator, Kirkwood Hall 114, 130 S. Woodlawn Avenue, Bloomington, IN 47405 (telephone [812] 855-8852; e-mail grdschl@indiana.edu; web: www.graduate.indiana.edu.

Further information for IUPUI students can be obtained from the Graduate Office at IUPUI, 207 Union Building, Indianapolis, IN 46202 (telephone [317] 274-1577; web: www.iupui.edu/~gradoff/office).

Doctoral Student Grants-in-Aid of Research

Grant-in-Aid of Doctoral Research

The grant-in-aid of doctoral research is designed to assist Bloomington doctoral students in funding unusual expenses arising from the research required for the dissertation. Examples of such expenses include travel to special libraries or laboratories, payments to consultants, specialized equipment, and duplication of vital materials needed for writing the dissertation. Expenses that are not supported include typing and duplicating of dissertations, normal living expenses, routine laboratory supplies, and computers. A student must have been formally admitted to Ph.D. candidacy by the application deadline (the Nomination to Candidacy Form must have been approved by the Dean of The University Graduate School). Students pursuing doctoral degrees other than the Ph.D. (i.e., Ed.D. or D.M.) may also apply for a Doctoral Student Grant-in-Aid of Research Award. Current students must be enrolled full-time on the Bloomington campus during the semester in which an application is submitted (6 credit hours is considered full time). **The maximum amount of aid is $1,000 per academic year. Awards are made two times a year; the deadlines for the receipt by the University Graduate School of the completed applications are in January and September. Application information can be found on the University Graduate School website, http://www.indiana.edu/~grdschl/internal-awards.php.**

Grant-in-Aid of Master's of Fine Arts Projects

The grant-in-aid of master's of fine arts projects is designed to assist in funding Bloomington MFA students for unusual expenses incurred in connection with MFA projects, such as travel to special libraries, payments to consultants, photocopies, electronics and specialized equipment. Expenses that are not supported include normal living expenses, routine supplies, and computers. A student must have been formally admitted to an MFA program by the application deadline. Current students must be enrolled full-time on the Bloomington campus during the semester in which an application is submitted (6 credit hours is considered full time). The maximum amount of aid is $1,000 per academic year. Awards are made two times a year; the deadlines for the receipt by the University Graduate School of the completed applications are in January and September. Application information can be found on the University Graduate School website, http://www.indiana.edu/~grdschl/internal-awards.php.

Other Student Financial Assistance

Long-term loans and Federal Graduate Work-Study are available to graduate students at IU. More information and application requirements are on the Indiana University Web site: www.indiana.edu/~sfa/.

IUPUI students should contact the Office of Student Financial Aid, CE 250A, 420 University Boulevard, Indianapolis, IN 46202 (telephone [317] 274-5555). For information about other campuses, contact Financial Aid Services, 2101 E. Coliseum Blvd., Fort Wayne, IN 46805 (telephone [260] 481-6820); the The Office of Scholarships and Financial Aid, KC 230, 2300 S. Washington St., Kokomo, IN 46904 (telephone [765] 455-9216); the Office of Scholarships and Financial Aid, Administration Building 157, P.O. Box 7111, 1700 Mishawaka Avenue, South Bend, IN 46634 (telephone [574] 520-4357); or the Office of Student Financial Aid, University Center South, Room 105, New Albany, IN 47150 (telephone [812] 941-2246).

The GradGrants Center—Bloomington

The GradGrants Center—Bloomington (GGC) is a free service available to all enrolled graduate students on all campuses of Indiana University. The GGC provides information and training to assist graduate students in their search for funding to further research and graduate study at Indiana University. The GGC's services include funding-database searches, workshops, one-on-one proposal-writing consultation, agency files, a library of funding sources and proposal-writing books, and an electronic mailing list used to inform patrons of upcoming workshops, grant deadlines, and relevant news. The center's website also provides students a central location to find available student academic vacancies and gives departments on any IU campus an additional means to advertise their positions.

The GradGrants Center—Bloomington is located in the Herman B Wells Library, Room 651E (telephone [812] 855-5281; e-mail gradgrnt@indiana.edu; website: http://www.indiana.edu/~gradgrnt/) .

Special Opportunities

This site describes additional opportunities and services provided by the University Graduate School and Indiana University which facilitate the attainment of graduate student goals.

Certificates

Area Certificates

Certificate programs are available in a number of areas; for further information, students should see the departmental entries in this bulletin. Such certificates can be pursued only in conjunction with a degree program and cannot be awarded independently.

Free-Standing Certificates

Graduate certificates are offered in some fields to allow a focused credential to be earned by a person who has already earned an undergraduate degree and is not enrolled in a master's or doctoral program. The courses taken are typically the same as those taken for other degrees, but a more limited number of courses is required for the certificate. Graduate certificates typically involve

a predetermined curriculum of 16 to 20 credit hours. Students enrolled in free-standing certificate programs who wish subsequently to pursue an advanced degree must make separate application to the University Graduate School and must have specific permission of the faculty of their degree program to use any credits earned as a certificate student for the more advanced degree.

Foreign Language Courses

Foreign Language Instruction

Indiana University offers instruction in a wide variety of foreign languages. Formal courses or tutorials have been offered in recent years on the Bloomington campus in the following:

- Akan
- American Sign Language
- Arabic
- Avestan
- Azerbaijani
- Bamana
- Bengali
- Buryat
- Catalan
- Chaghatay
- Chechen
- Chinese (Classical and Mandarin)
- Coptic
- Croatian
- Czech
- Dari
- Dutch
- English as Second Language
- Estonian
- Evenki
- Finnish
- French
- Georgian
- German
- Gothic
- Greek (Classical and Modern)
- Haitian Creole
- Hebrew (Biblical and modern)
- Hindi
- Gujarati
- Hungarian
- Italian
- Japanese (Classical and Modern)
- Kazakh
- Korean
- Kurdish
- Lakota (Sioux)
- Latin
- Macedonian
- Manchu
- Manichaean
- Middle High German
- Mongolian (and Classical Mongolian)
- Navajo
- Norwegian
- Old Church Slavonic
- Old English
- Old High German
- Old Icelandic
- Old Irish
- Old Saxon
- Old Tibetan
- Old Turkic
- Pahlavi
- Pashto
- Persian
- Polish
- Portuguese
- Quechua
- Romanian
- Russian
- Sakha (Yahut)
- Sami (Lappish)
- Sanskrit
- Serbian
- Shona
- Sioux (Lakota)
- Slovak
- Slovene
- Sogdian
- Spanish
- Swahili
- Swedish
- Syriac
- Tajik
- Tibetan
- Turkish (Modern and Ottoman)
- Turkmen
- Ukrainian
- Urdu
- Uyghur
- Uzbek
- Welsh
- Wolof
- Yiddish
- Yucatec Maya
- Zulu

Preparing Future Faculty

A number of graduate programs have established Preparing Future Faculty programs, which are designed to introduce graduate students to the full range of professional responsibilities in research, teaching, and service they will encounter in academia. These programs typically include more advanced courses in pedagogy, the opportunity to work closely with teaching mentors and to construct teaching portfolios, workshops on specialized topics, and expanded teaching possibilities, often in cooperation with other campuses of Indiana University or other institutions. For information about these programs, contact the individual departments. Further information for IUB students can be obtained from the University Graduate School, Kirkwood Hall 114, 130 S. Woodlawn Avenue, Bloomington, IN 47405 (telephone [812] 855-5697; e-mail grdschl@indiana.edu; web: www.graduate.indiana.edu.

Traveling Scholar Program

Committee on Institutional Cooperation Traveling Scholar Program

This program enables Indiana University doctoral-level students to take advantage of special resources available at other CIC institutions[1] that do not exist at Indiana University. Students in the program register and pay fees at Indiana University but attend one or more of the participating institutions, each for no more than two semesters or three quarters. To view a list of all participating campuses, as well as eligibility requirements, program details, and online application information, please visit the Web site www.cic.net/Home/Projects/SharedCourses/TScholar/Introduction.aspx. For further information regarding Indiana University, contact Jody Smith, the University Graduate School, Kirkwood Hall 114 (812-855-4010; www.indiana.edu/~grdschl/).

[1] The member institutions of the Committee on Institutional Cooperation (CIC) are the University of Chicago, the University of Illinois at Urbana-Champaign, Indiana University, the University of Iowa, the University of Michigan, Michigan State University, the University of Minnesota, Northwestern University, Ohio State University, Pennsylvania State University, Purdue University, and the University of Wisconsin-Madison.

University Information Technology Services (UITS)

Students at Indiana University enjoy one of the most extensive information technology environments in the nation. Consistently ranked as one of America's "most wired" universities, IU is recognized as a leader and innovator in information technology.

University Information Technology Services (UITS) is the main technology organization at IU and develops and maintains a modern information technology environment throughout the university in support of IU's vision for excellence in research, teaching, outreach, and lifelong learning.

UITS assists in academic success with tools and services to support the academic and administrative work of the university, including a high-speed campus network with wireless access, central Web hosting, a rich selection of free and low-cost software for personal use, tools and support for instruction and research, supercomputers for data analysis and visualization, and telecommunications systems.

At IUB, the UITS main office is at 2711 E. Tenth Street (Wrubel Computing Center) and several other Bloomington campus locations. At IUPUI, the UITS main office is in the Informatics and Communications Technology Complex (ICTC) at 535 W. Michigan Street.

More information on UITS support and services is available at http://www.uits.iu.edu/.

Research

UITS supports IU's teaching and research mission by providing and facilitating the use of centralized research computing resources. The high-performance computing systems dedicated to IU research are configured to optimize stability and throughput for CPU intensive, I/O intensive, and/or memory intensive jobs. Use of these systems is restricted to IU faculty, faculty-sponsored graduate students, or faculty-sponsored staff, and support a broad range of areas, including life sciences, archaeology, astronomy, and computational physics.

An IBM Opteron cluster known as AVIDD (Analysis and Visualization of Instrument-Driven Data) is a distributed computing facility designed to process data generated by large scientific instruments. AVIDD runs Redhat Linux and supports parallel processing.

Other research computing resources include an IBM Blade cluster running AIX, and the Research Database Complex (RDC). The RDC supports large Oracle databases and is comprised of database servers (Sun V1280) and Web front-end to access them.

General-purpose and instructional computing is supported by a Sun V100 cluster known as Steel. To users, the group of servers appears as a single resource. Steel is available to any member of the university community and is popular among undergraduate Unix users.

Terabtyes of data can be managed by IU's Massive Data Storage System (MDSS). This advanced system provides researchers with flexible, high-performance, high-capacity resources for data management.

Data visualization is another area of expertise at IU. The UITS Advanced Visualization Laboratory (AVL) supports two world-class, state-of-the-art displays within the new Informatics and Communications Technology Complex (ICTC) at IUPUI: an ultra-high-resolution display wall and a reconfigurable virtual reality theatre. These two resources complement AVL mid-range technologies, including the John-e-Box, commodity rendering clusters, Access Grid nodes, and 3D scanning devices.

Networking

IU provides world-class network connectivity to its researchers in support of high-performance networking and research applications. IU is a founding member of Internet2 and runs the Network Operations Center for the Abilene Internet2 network. In addition to having its own fiber optic network, I-Light, connected to Internet2, IU is a member of TeraGrid, a national, open scientific discovery infrastructure. IU is also the lead U.S. institution in the TransPAC2 connection between U.S. research and education networks and the Asia Pacific Advanced Network. In addition to high-speed Ethernet connections on campus, UITS provides wireless connection to the IU network at many locations on campus.

UITS Technology Centers

UITS provides hundreds of computing workstations in both Student Technology Centers (STCs—located in academic buildings) and Residential Technology Centers (RTCs—located in campus housing), which offer students a rich array of up-to-date hardware, software, printers, and plotters. To meet the needs of a diverse student population, the STCs and RTCs provide a variety of hardware platforms and operating systems. Some STCs can be reserved for teaching classes.

Campus Housing Technology Services

All campus housing computing support and telephone service is provided by UITS. Each campus residence offers high-speed Ethernet connectivity and dedicated residential support.

Software, Hardware, and Wireless Phone Service

Free or low-cost software for students is available thanks to UITS's license agreements with companies such as Microsoft, Adobe, SPSS, and Symantec. Offerings include operating systems, antivirus programs, and software for word processing, spreadsheets, Web development, citation management, statistical analysis, graphic design, and more.

Many software titles are available for free download while other titles are available on CD at campus bookstores at deep discount. Students also benefit from educational discounts negotiated with vendors such as Apple, Dell, and CDW-G. Likewise, IU has an agreement with Cingular Wireless to provide discounted personal cellular services to students.

Free and Low-Cost Information Technology Classes

UITS offers instructor-led computing workshops and provides self-study training resources. Workshops are available on more than 80 beginning to advanced computing and information technology topics.

Expert Help 24/7

UITS offers a number of choices for award-winning information technology support:

- Visit Support Center walk-in services—IUB: Indiana Memorial Union (room M084) and in the Information Commons (first floor of the Herman B Wells Library); IUPUI: Informatics and Communications Technology Complex (room IT 129).
- Get UITS online support at www.uits.iu.edu.
- UITS Support Center phone consultants—IUB: 855-6789; IUPUI: 274-4357.
- E-mail the Support Center—ithelp@indiana.edu.
- Chat with Support Center consultants— http://ithelplive.iu.edu/.

News and Notices

Most students are automatically subscribed to the UITS Monitor (IUB) or UITS Newsbit (IUPUI) electronic newsletters when they get their e-mail accounts. These newsletters provide award-winning weekly updates on a range of topics. Subscription information and Web-based news is available at http://uitsnews.iu.edu/.

For More Information

Learn more about UITS support and services at www.uits.iu.edu/.

Programs by Campus

The University Graduate School administers degree programs on six campuses of Indiana University. This site provides information on all graduate courses and degree programs approved by the University Graduate School on each campus.

Bloomington

African American and African Diaspora Studies

College of Arts and Sciences
Curriculum

Program Information

The multidisciplinary Department of African American and African Diaspora Studies seeks to:

1. create and share with academic and nonacademic communities scholarship of the highest quality dealing with the broad range of the African American and African Diaspora experience;
2. promote the study and understanding of the historical and contemporary connections among Africans, African Americans, and other New World black communities; and
3. affirm the democratic tradition of equal opportunity for all by combating all forms of discrimination based on ethnicity, gender, class, and religious differences. The department assumes the ongoing responsibility of creating materials and conducting seminal research that aids in the development and shaping of African American and African Diaspora Studies as a discipline.

Master of Arts Degree

The Department of African American and African Diaspora Studies at Indiana University is committed to being one of the world's leading multi- and interdisciplinary graduate studies programs focused on peoples of African descent in the United States in comparison to African-descent peoples in other globalized contexts. With an emphasis on diverse epistemologies, theories, methodologies, ethical considerations, and innovative teaching pedagogies, our goals are:

1. to offer students an intense program in the examination of African American issues as well as diasporic African descent issues in and outside the United States and their transnational continuities and discontinuities;
2. to encourage students to develop and/or fine-tune excellent and creative research skills, superb writing and oral communications skills, multidisciplinary and interdisciplinary analytical skills, technological competencies, innovative problem solving and problem creation skills, collaborative research skills, and intercultural competence skills;
3. to provide students with invaluable intellectual training by bridging curriculum content and practical experience gained from oral history, survey, and ethnographic field work; research based in museums and library archives; and internship opportunities in a broad spectrum of agencies, organizations, and institutions;

4. to sustain a learning environment in which students create as well as refine critical questions and develop problem creation as well as problem solving skills in the humanities and social sciences and synthesizing bridges between the humanities and social sciences in their explorations and interpretations of African descent experiences in the United States and abroad;
5. to give students planning to pursue doctoral training in the social sciences, humanities, or in interdisciplinary fields excellent research foundations;
6. to prepare students for a broad spectrum of career possibilities in academia, creative and performing arts, nonprofit management, public policy, libraries, philanthropy, museums, urban studies, conflict resolution, and social services.

The purposes of this program are:

1. to offer students an intense program in the analysis of African American issues;
2. to expose students to both historical and current methodological approaches;
3. to expose students to issues throughout the African Diaspora;
4. to refine critical and problem-solving skills in both the humanities and social sciences;
5. to extend a sound basis for those going into a doctoral program; and
6. to prepare students for administrative, teaching, communication, and social service careers.

In sum, the program provides a theoretical base of knowledge, methods of research, and a context for analyzing African American and Diaspora experiences that can be invaluable either in further graduate studies or in a specific job or career choice.

Admission Requirements

The program is open to any eligible student with a bachelor's degree from an accredited college. Applicants must have a minimum grade point average (GPA) of 3.0. Letters of recommendation, a brief personal essay, and GRE scores are the main sources of information upon which decisions will be made.

Course Requirements

All students will complete a minimum of 32 credit hours with a minimum 3.0 GPA. Students are required to complete courses in the following categories:

1. Introduction to African American and African Diaspora Studies, parts I and II;
2. Choice of two proseminars (Writings and Literatures; Social and Behavioral Sciences; Performing, Visual, and Material Arts; and Historical and Cultural Studies);
3. Research and master's thesis colloquium;
4. Seminars in area of specialization;
5. Core readings; and
6. Field study and research seminar

Foreign Language

M.A. candidates may satisfy the foreign language requirement by showing satisfactory completion of course work or passing a language proficiency exam. Students in the History, Culture, and Social Issues concentration have the additional option of selecting between computer science or statistical methods.

Dual M.A./M.L.S. in African American and African Diaspora Studies (Master of Arts) and the School of Library and Information Science (Master of Library Science)

The dual M.A./M.L.S. program requires completion of a minimum of 58 credit hours of graduate course work. (The degrees if completed separately would require 68 credit hours.) Students must apply for admission to the master's programs of both African American and African Diaspora Studies and the School of Library and Information Science and meet the admissions criteria established for each. The two degrees must be awarded at the same time.

M.A. in African American and African Diaspora Studies

Requirements (28 credit hours minimum)

General Requirement (12 cr.)

- A500 Introduction to African American and African Diaspora Studies, Part I (3 cr.)
- A690 Core Readings in African American and African Diaspora Studies (4 cr.)

Proposed Graduate Internship

Specialization (12 cr. minimum):
Students would take a minimum of 9 graduate hours in one of the three concentration areas in African American and African Diaspora Studies. An additional 3 graduate hours should be taken in one of the other concentration areas.

- M.A. Thesis A698 Field Study Seminar (4 cr.)
- Master of Library Science Requirements (30 credit hours)
- Completion of the M.L.S. Foundation courses (15 cr.)
- Either SLIS L623 Information in the Humanities or
- SLIS L625 Information in the Social Sciences (3 cr.)
- SLIS elective courses (12 cr.)

Dual M.A./M.P.A. in African American and African Diaspora Studies (Master of Arts) and School of Public and Environmental Affairs (Master of Public Affairs)

Students must apply separately to and be accepted into both the African American and African Diaspora Studies Master of Arts degree program and the School of Public and Environmental Affairs degree program. Students must indicate on both application forms that they are applying for the AAADS/SPEA dual degree.

M.A. in African American and African Diaspora Studies Requirements (28 credit hours minimum)

General Requirement (12 cr.):

- A500 Introduction to African American and African Diaspora Studies, Part I (3 cr.)
- A690 Core Readings in African American and African Diaspora Studies (4 cr.)

Proposed Graduate Internship

Specialization (12 cr. minimum):

Students would take a minimum of 9 graduate hours in one of the three concentration areas in African American and African Diaspora Studies. An additional 3 graduate hours should be taken in one of the other concentration areas.

- M.A. Thesis A698 Field Study Seminar (4 cr.)
- M.A. of Public Affairs Requirements (36 cr.)
- M.P.A. Core (21 cr.)
- V501 Professional Development Practicum: Information Technology (1 cr.)
- V502 Public Management (3 cr.)
- V503 Professional Development Practicum: Writing and Presentation (1 cr.)
- V505 Professional Development Practicum: Teamwork and Integrated Policy Project (1 cr.)
- V506 Statistical Analysis for Effective Decision Making (3 cr.)
- V517 Public Management Economics (3 cr.)
- V540 Law and Public Affairs (3 cr.)
- V560 Public Finance and Budgeting (3 cr.)
- V600 Capstone in Public and Environmental Affairs (3 cr.)

Specialized Concentration (15 cr.)

Students are required to develop specialized concentrations comprised of courses approved by SPEA faculty advisors.

Doctor of Philosophy Degree

The interdisciplinary doctoral degree in African American and African Diaspora Studies (AAADS) focuses on the experiences of people of African descent in the United States, in the African Diaspora, and in the world. These shared experiences—among them, slavery, emancipation, imperialism, decolonization, and racism—warrant close attention, and mark this field (Black Studies/Africana Studies) as a discrete unit of study that bears directly and powerfully on world history, literature, and politics. The doctoral degree offers graduate students two different tracks or specializations to focus their course work—“Power, Citizenship, and the State” and “Race, Representation, and Knowledge Systems”—which reflect the current state of the field and take advantage of the traditional strengths of the department, its adjunct faculty, the College of Arts and Sciences, and the Bloomington campus. Within each of these tracks, the degree emphasizes the importance of transnational, global, and comparative perspectives, with an emphasis on the interdisciplinary analysis of race in the world. To provide meaningful support and guidance, this degree program offers extraordinarily supportive mentoring, a reflection of the department’s 40-year commitment to quality teaching.

Admission Requirements

The AAADS Graduate Studies Committee, in consultation with the chair of the department and faculty, will be responsible for the admission of graduate students into the doctoral program. That committee will consider Graduate Record Examination scores, a personal statement, a writing sample of no more than 30 pages, and at least three letters of reference from instructors who have sufficient evidence to write candidly about the student’s intellectual abilities and potential for success in this endeavor. Prospective graduate students who hold a master’s degree must have a cumulative grade point average of 3.5 on a 4.0 scale in their prior program(s). Incoming graduate students who have recently completed their undergraduate studies must have at least a 3.3 grade point average for their last two years of undergraduate studies.

Course Requirements

All students must complete a minimum of 90 hours with a cumulative grade point average of 3.5 on a 4.0 scale in their prior program(s). Incoming graduate students who have recently completed their undergraduate studies must have at least a 3.3 grade point average for their last two years of undergraduate studies.

90 hours total, including:

- 24 core credit hours, taken through 6 core courses: A500, A556, A557, A605, A606 and A696
- 21 elective hours, including 3 credits in an overseas studies/study abroad class, with graduate content, approved by the DGS; 6 hours in disciplinary methods courses offered outside the department and chosen in consultation with the DGS; and 12 additional hours in related course work
- 6 hours of a foreign language of the African diaspora
- 15 hours in an outside minor
- 24 hours of dissertation research
- Pre-candidacy qualifying examination (The M.A. is automatically granted to students passing the qualifying exam.)
- Dissertation
- Final examination (defense of the dissertation)

Tracks:

- Race, Representation, and Knowledge Systems
- Power, Citizenship, and the State

Core curriculum:

- A500 Introduction to African American and African Diaspora Studies I
- A556 Race and Culture in the African Diaspora
- A557 Race and Politics in the African Diaspora
- A605 Race and the Global City I
- A606 Race and the Global City II
- A696 Interdisciplinary Research Methods

Ph.D. Minor in African American and African Diaspora Studies

The department offers the Ph.D. minor in African American and African Diaspora Studies for students enrolled in any doctoral program at Indiana University. The minor requires 15 credit hours: A500 and A503: Introduction to African American andAfrican Diaspora Studies I and II, and 9 credit hours of a concentration in one of the department's three concentration areas:

1. arts;
2. literature; and
3. history, culture, and social issues.

With written permission of the graduate advisor, students may take two courses (6 cr.) in one concentration area and one course (3 cr.) in another.

Admission

Doctoral students in good standing are admitted to the African American and African Diaspora Studies minor through interview or correspondence with the graduate advisor. At the time of admission, each student and the graduate advisor together plan an individualized program of study, including the selection of a major concentration area.

Course Requirements

A total of 15 credit hours, to include three courses (9 cr.) in one concentration area and two courses (6 cr.) in another area. With written permission of the graduate advisor, students may take four courses (12 cr.) in a single concentration area and one course (3 cr.) in another area.

Grades

A cumulative grade point average of 3.4 is required of work for the Ph.D. minor.

Examination

A comprehensive examination usually is not required; however, the decision to waive the examination rests with the faculty committee of the student's concentration area.

Faculty

Chairperson

Valerie Grim*

Departmental E-mail: aaads@indiana.edu

Departmental URL: www.indiana.edu/~afroamer

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Akwasi B. Assensoh*; Winona Fletcher* (Emerita, Theatre and Drama); Eileen Julien*; Phyllis Klotman* (Emerita); Michael T. Martin*; John A. McCluskey* (Emeritus); Iris Rosa*; John H. Stanfield; William Wiggins Jr.* (Emeritus); Vernon J. Williams Jr.

Associate Professors

Valerie Grim*; LaMonda Horton-Stallings*; Matthew Guterl*; Audrey T. McCluskey*; Frederick L. McElroy*

Assistant Professors

Marlon M. Bailey*; Micol Seigel*; Stephen Selka*

Adjunct Graduate Faculty

Distinguished Professor

David Baker (Music)

Professors

Kevin Brown (Law); Mellonee Burnim* (Folklore and Ethnomusicology); Claude Clegg* (History); George B. Hutchinson* (English); James Madison* (History); Portia Maultsby* (Ethnomusicology); Michael McGerr* (History); Samuel Obeng* (Linguistics)

Associate Professors

Yvette Alex-Assensoh* (Political Science); Carolyn Calloway-Thomas* (Communication & Culture); Stephanie Carter* (Language Literacy Education); Monroe H. Little (History); Gary Sailes (Kinesiology)

Assistant Professors

Karen Bowdre (Communication and Culture; Edris Cooper-Anifowoshe (Theatre & Drama); Dionne Danns (Education); Sylvester Johnson (Religious Studies); Frank Motley; Khalil Muhammad (History); Amrita Myers* (History)

Graduate Advisor

Iris Rosa

rosa@indiana.edu
855-8079

Courses

General

AAAD–A 500 Introduction to African American and African Diaspora Studies, Part I (3 cr.) Through an interdisciplinary approach, students are introduced to the major works concerning the historical, cultural, and intellectual experiences of Africans in the Diaspora, and the research, methodological, and theoretical questions raised therein in preparation for study in AAADS Part II.

AAAD–A 503 Introduction to African American and African Diaspora Studies, Part II (3 cr.) As the second half of the sequence in the year-long introductory course on Introduction to African American and African Diaspora Studies, this course focuses specifically on the research methods, theoretical issues, and approaches to publishing in the discipline.

AAAD–A 554 Comparative Ethnic Studies (4 cr.) This colloquium provides an introduction to Ethnic Studies, focusing on theinterdisciplinary study of race and ethnicity in the U.S. and the Americas, past and present. Emphasis will be placed on border crossing, visual representation, literature, nationalism, migration, political transformation, and mass culture.

AAAD–A 555 Caribbean, African American. and African Leadership, 1957-2000 (3 cr.) Course will deal with aspects of Caribbean, African-American, and African leadership that influenced the struggles for decolonization and civil rights in the Caribbean, United States, and Africa.

AAAD–A 590 Special Topics in African American and African Diaspora Studies (3 cr.) Intensive study and analysis of selected Afro-American problems and issues of limited scope, approached within an interdisciplinary format. Topics will vary, but will ordinarily cut across departmental concentration areas.

AAAD–A 591 Black Intellectual Traditions (4 cr.) Surveys the evolution of "racial" ideas and ideologies among African Americans. Participants will discuss how black intellectuals have engaged in dialogue and debate about strategies for coping with injustice, while formulating

diverse concepts of justice, salvation, artistry, and positive black identity.

AAAD–A 690 Core Readings in African American and African Diaspora Studies (4 cr.) Preparation for the comprehensive master's examination. Colloquium in which students will read and critically examine, both in oral presentations and in written assignments, core texts which reflect the complexity and pluralism of African American and African Diaspora Studies.

AAAD–A 695 Research and Master's Thesis Colloquium (3 cr.) This interactive seminar utilizes a collaborative team approach within an interdisciplinary framework to address issues and questions students have concerning fieldwork, compiling data, and interpreting historical and cultural primary and secondary sources.

AAAD–A 696 Interdisciplinary Research Methods (4 cr.) This course examines seminal texts and critical issues in African American and African Diaspora Studies by utilizing an interdisciplinary approach to understanding the humanities, literature, social sciences, arts, and performance in such locales like the U.S., the Dominican Republic, Guyana, Ghana, France, and Japan.

AAAD–A 697 Special Topics in AADS (4 cr.) This course conducts an intensive study an analysis of selected historical and contemporary issues relating to the experiences of Blacks in the Diaspora. Course strategies emphasize critical methodology and analytical writing.

AAAD–A 698 Field Study Seminar (4 cr.) Development of the final master's project. A critical paper, a thesis-length documentation of a field study, or a substantial record of creative activity is required.

AAAD–A 708 Transnational Method: Historiography, Theory, Practice (4 cr.) This course will examine transnational academic study from a theoretical-methodological perspective by reviewing historiographic roots of transnationalism and also by reflecting on the theoretical imperatives that emerge in recent scholarship concerning the African Diaspora.

AAAD–A 709 Qualitative and Ethnographic Methods in AAADS (4 cr.) This course provides a survey of qualitative research methods, with an emphasis on using ethnographic and theoretical approaches to establish interdisciplinary perspectives.

Literature

AAAD–A 501 Seminar in the Harlem Renaissance (4 cr.) Study of the major historical figures of the period designated by cultural historians as the Harlem Renaissance (ca. 1919-29), with emphasis on the sociopolitical reasons for the proliferation of art, music, and literature during this significant decade, with examination of the causes and lasting influences on contemporary black culture.

AAAD–A 502 Seminar on Wright, Baldwin, and Ellison (4 cr.) A close critical study of selected works by Richard Wright, James Baldwin, and Ralph Ellison to assess their relationship with Harlem Renaissance emphases, contemporary American writing, and the black arts movement. The relationship of these men and their works to relevant sociopolitical issues such as McCarthyism, the liberation of African nations, and the civil rights campaigns of the early 1960s will also be examined.

AAAD–A 561 Afro-American Autobiography (3 cr.) A survey of autobiographies written by black Americans in the last two centuries. The course emphasizes how the autobiographers combine the grace of art and the power of argument to urge the creation of genuine freedom in America.

AAAD–A 571 Black Literature for Teachers (3 cr.) A survey of black American literature from the Harlem Renaissance to the present with opportunities for research into teaching materials. This course is designed primarily for teachers. Credit not given for this course toward Ph.D. minor.

AAAD–A 579 Early Black American Writing (3 cr.) Afro-American writing before World War II with emphasis on critical reactions and analyses. Includes slave narrative, autobiography, rhetoric, fiction, and poetry.

AAAD–A 580 Contemporary Black American Writing (3 cr.) The black experience in America as it has been reflected since World War II in the works of outstanding Afro-American writers: fiction, nonfiction, poetry, and drama.

AAAD–A 583 Blacks in American Drama and Theatre, 1767-1945 (3 cr.) Image of blacks as reflected in American drama from 1767 to 1945. Selected dramas of both white and black playwrights, such as Isaac Bickerstaffe, William Wells Brown, Eugene O'Neill, and Richard Wright, who depicted blacks on the stage.

AAAD–A 584 Blacks in American Drama and Theatre, 1945-Present (3 cr.) Image of blacks as reflected in American drama from 1945 to the present. Emphasis on the contributions of black playwrights, such as Lorraine Hansberry, Langston Hughes, Imamu Amiri Baraka (LeRoi Jones), Ted Shine, and Ed Bullins.

AAAD–A 585 Seminar in Black Theatre (3 cr.) Contributions of blacks to the theatre in America. Reading and discussion of selected dramas and critiques with opportunities for involvement in the oral interpretation of one or more of the plays.

AAAD–A 678 Early Black American Poetry, 1746-1910 (3 cr.) A literary and historical survey of general trends and individual accomplishments in early Afro-American poetry, ranging from narrative folk poems, the formalist poetry of Jupiter Hammon and Phillis Wheatley, and the popular poetry of Frances E. W. Harper and Paul Laurence Dunbar to early modern poetry.

AAAD–A 679 Contemporary Black Poetry (3 cr.) An examination of black poetry from Dunbar to the present, emphasizing the emergence, growth, and development of black consciousness as a positive ethnic identification.

AAAD–A 680 The Black Novel (3 cr.) Analysis of the Afro-American novel from the Harlem Renaissance to the present: genesis, development, and current trends. Emphasis on traditions arising out of the black experience and on critical perspectives developed by black critics and scholars.

AAAD–A 689 Independent Project in Black Literature (3 cr.) Designed to meet individual interests of students by providing opportunities for research on a chosen topic and

by encouraging nontraditional approaches or settings in the application of concepts developed in formal classes.

AAAD–A 692 Pro-Seminar in Writings and Literature in African American and African Diaspora Studies (3 cr.) Introduces graduate students to interdisciplinary and globalized approaches to Africans in the Diaspora and the Americas, as well as the canons, paradigms, theories, methods, and seminal-thinker biographies of the field.

Arts

AAAD–A 541 Third World Cinemas (3 cr.) Historically contingent, culturally inflected, and formally innovative, Third World films are a major current in world cinema. This course surveys the cinematic traditions, practices, and thematic concerns of Third World cinemas. Emphasizing the political and cultural significations of cinema, select narrative fiction and documentary films are examined. Subjects under study include filmic approaches to colonialism and postcoloniality, cinematic formations and social processes, and the legitimizing and oppositional practices of film.

AAAD–A 542 Postcolonial Metropolitan Cinemas (3 cr.) Study of selected films from the 1980s to the current period by diasporic/"exilic" and European filmmakers, constituting an emerging cinematic formation in contrast to Hollywood and mainstream European cinemas. Emphasizing distinctive styles and cinematic practices, the films under study are framed by the de-territorializing process of globalization and examine shared thematic concerns of transnational migration, the emigre experience, and postcoloniality.

AAAD–A 594 Issues in African American Music (3 cr.) A chronological overview of the primary genres of African American music, from slavery to present. Emphasis placed on understanding the separate identities of individual genres and examining those processes by which they are interrelated and are cultural objects for appropriation. Credit given for only one of AAAD-A594, FOLK-E694, or FOLK-F694.

AAAD–A 687 African American Popular Music (3 cr.) An examination of African American popular music from 1945-2000. Organized topically, this course will examine the production of this tradition as a black cultural product and its transformation into a mass marketed commodity for mainstream and global consumption. Credit given for only one of AAAD-A687 or FOLK-E697.

AAAD–A 694 Pro-Seminar on Performing, Visual, and Material Arts in African American and African Diaspora Studies (3 cr.) Introduces students to interdisciplinary and globalized approaches to Africans in the Americas and the Diaspora as well as the canons, paradigms, theories, methods, and seminal-thinker biographies of the field.

AAAD–A 699 Independent Project in Black Music (3 cr.) Designed to meet individual interests of students by providing opportunities for in-depth research on a chosen topic and by providing settings for the creative and practical application of concepts developed in formal class settings.

History, Culture, and Social Issues

AAAD–A 504 Black Paris: Migration and Cosmopolitanism in the City of Light (3 cr.) Independent field study and supervised research on the topic of Black Paris—the lived artistic, cultural, intellectual, and social experiences of African-derived groups (i.e., African Americans, Africans, and Afro-Caribbeans) in the City of Light—as it pertains to their specific areas of interest. Students are also encouraged to attend A304.

AAAD–A 550 Black Atlantic (4 cr.) An interdisciplinary and comparative study of historical, cultural, and political issues related to Africa and the African Diaspora (the Americas and Europe).

AAAD–A 552 History of the Education of Black Americans (3 cr.) Education of black Americans and its relationship to the Afro-American experience. Trends and patterns in the education of black Americans as they relate to the notions of education for whom and for what.

AAAD–A 556 Race and Culture in the African Diaspora (4 cr.) This course provides an introduction to research on race and culture in the African Diaspora by exploring such issues as nationalism, transportationalism, popular culture, material culture, class, masculinity, feminism, hybridity, representation, performance, commodification, and identity.

AAAD–A 557 Race and Politics in the African Diaspora (4 cr.) This course introduces students to theories, methodologies, and scholarship on the relationship between race and politics in the African Diaspora by examining central themes relating to the state, citizenship, public policy, racial ideologies, and de jure and de facto segregation.

AAAD–A 558 The African Diaspora in Latin America and the Caribbean (4 cr.) This course examines how Brazilians of African descent construct their identities through cultural and political practices by examining similarities and differences between racial identity and race relations in Brazil and the U.S. within the context of social mobilization, cultural affirmation, religious practices, and everyday life.

AAAD–A 565 The Black Press in African and the Diaspora (4 cr.) This seminar is geared toward graduate students, but can be opened to upper-level undergraduates. A comparative overview of the Black Press in Africa and the Diaspora, this course introduces students to the histo-political nuances of the Press during colonial and postcolonial times, as well as to its role in the American civil rights period.

AAAD–A 592 Readings in Black Popular Culture (3 cr.) Interrogates the historical and social deployment of blackness in the popular imagination and its manifestations in racially coded performances. We take a historical stance on black expressive culture and proceed using critical and theoretical texts, aiming at culturally saturated forms, including music, oral “texts,” film, and sport.

AAAD–A 602 Variations on Blackness: Part I (4 cr.) Intensive reading program. Students will also develop a research proposal and work to grasp the global comparative complexities of race-making.

AAAD–A 603 Variations on Blackness: Part II (4 cr.) Students will develop a research project based on their proposals from part I of this course.

AAAD–A 605 Race and the Global City, Part I (4 cr.) This course will examine the unique demographic, political, and economic characteristics of major cityscapes and will discuss the various locations from interdisciplinary perspectives using various fields in the humanities, literature, and film.

AAAD–A 620 Transforming Divided Communities and Societies (3 cr.) Investigation of divided societies and of strategies for transforming such communities. Students will consider societies (both past and present) divided by race, ethnicity, gender, class, caste, tribe, or religion, and will study responses such as civil rights, affirmative action, reparation policies, and reconciliation tribunals.

AAAD–A 669 Independent Project in Black Social Issues (3 cr.) Designed to meet individual interests of students by providing opportunities for research on a chosen topic and by encouraging nontraditional approaches or settings in the application of concepts developed in formal classes.

AAAD–A 691 Pro-Seminar on Cultural and Historical Studies in African American and African Diaspora Studies (3 cr.) Introduces graduate students to interdisciplinary and globalized approaches to Africans in the Americas and the Diaspora, as well as the canons, paradigms, theories, methods, and seminal-thinker biographies of the field.

AAAD–A 693 Pro-Seminar on Social and Behavioral Sciences in African American and African Diaspora Studies (3 cr.) This pro-seminar introduces graduate students to interdisciplinary and globalized approaches to Africans in the Americas and the Diaspora, as well as the canons, paradigms, theories, methods, and seminal-thinker biographies of the field.

AAAD–A 702 Comparative Social Movements in the African Diaspora (4 cr.) This course focuses on the varied diasporic experience, analyzing how struggles of race, identity, and nation in specific time periods, locales, and cultural contexts in the U.S., Latin Americas, Europe, and Africa have contributed to the development of social and political movements in the Diaspora.

AAAD–A 703 Black Feminisms (4 cr.) This course examines the interlocking experience of black women in the Diaspora and the foundational issues that have shaped their sense of womanism and African feminism. Using classical literary and biographical texts and narrative writings of black women, the analysis emphasizes contemporary issues by also interrogating popular culture media through film and music to criticize the rhetoric of sisterhood.

AAAD–A 704 African Americans and Continental Africans: Ties that Bind (4 cr.) In old and modern times alike, continental Blacks (or Africans) and Diaspora Blacks have been considered kith and kin. This course —with its wide range of readings and research sources —is designed to help graduate students understand the nuances of these histo-political connections.

AAAD–A 705 African and African American Leadership in the 20th and 21st Centuries (4 cr.) Since arriving in the Americas, Africans have had to confront the need for leadership and the development of strategies to liberate Black bodies in order for Black people to act as their own agents of change. This course examines the historical and cultural dialogues among Black leaders in the African Diaspora to analyze how Blacks reestablished themselves in the new world.

AAAD–A 710 Rural Blacks in the African Diaspora (4 cr.) This course examines the experiences of Blacks in rural areas throughout the African Diaspora to investigate how long-term systemic political, social, and economic struggles have impacted the development of rural African peoples and their communities in such places as the southern U.S., South Africa, Guyana, and Ireland.

AAAD–A 711 Blackface and Blackness in Global Context (4 cr.) This course explores blackface and other performances and appropriations of blackness in the African Diaspora, emphasizing the ways in which ideas of minstrelsies have continued by white and black performers as seen through media, culture racialidentity formations, and racialized agency through entertainment.

AAAD–A 720 Comparative Study of Black Women in the Rural African Diaspora (4 cr.) This course examines the social and economic struggles of rural Black women in the African Diaspora by focusing on family, life, work rules, health, leadership, and agency through self-constructed identity and ideas of womanism.

Cross-Listed Courses

LITERATURE

English

- L655 American Literature and Culture 1900-1945 (4 cr.)

ARTS

Music

- M582 The Bebop Era (3 cr.)
- M583 Duke Ellington (3 cr.)
- M584 Research in the History and Analysis of Jazz (3 cr.)
- M596 Art Music of Black Composers (3 cr.)

HISTORY, CULTURE, SOCIAL ISSUES

Anthropology

- E450 Folk Religions (3 cr.)
- E455 Anthropology of Religion (3 cr.)
- E457 Ethnic Identity (3 cr.)
- E650 African Systems of Thought (1-3 cr.)

Communication and Culture

- S727 Seminar in Cross-Cultural Communications (3 cr.)

Criminal Justice

- P680 Seminar: Issues in Criminal Justice (3 cr.)

Folklore

- F609 African and Afro-American Folklore/Folk Music (3 cr.)
- F625 North American Folklore/Folk Music (3 cr.)

History

- E531 African History from Ancient Times to Empires and City States (3 cr.)
- E532 African History from Colonial Rule to Independence (3 cr.)
- E534 History of Western Africa (3 cr.)

Political Science

- Y657 Comparative Politics (3 cr.)

Sociology

- S610 Urban Sociology (3 cr.)
- S631 Intergroup Relations (3 cr.)

African Studies

College of Arts and Sciences
Curriculum

Departmental E-mail: afrist@indiana.edu
Departmental URL: www.indiana.edu/~afrist

Program Information

The field of African Studies at Indiana University focuses primarily on Africa south of the Sahara. Attention is given, however, to developments and events In North Africa that have significance for other areas of the continent. The program is designed to give students a broad knowledge of the art, ethnography, folklore, history, economic development, languages, literature, music, and politics of this region. Care is also taken to prepare graduate students who will specialize in this region as teachers, researchers, foreign service personnel, museum professionals, journalists, or business professionals.

M.A. in African Studies

The African Studies master's degree program is intended for students who wish to: (1) obtain a graduate degree in African Studies in order to pursue careers in government, international relations (e.g., the Diplomatic Corps), international development, international business, or a professional field; (2) continue graduate work in a discipline; or (3) combine an M.A. degree in African Studies with another master's degree in the arts, social and other sciences, or in one of the professional schools. The program normally takes two years to complete. It gives students the flexibility to tailor course work to their needs and interests while requiring them to develop competence on a particular topic or region as well as in research methods and at least intermediate proficiency in an African language.

Admissions Requirements

Bachelor's degree from an accredited institution of higher education with evidence of superior ability, completion of the graduate record exam, a statement of interest, and a writing sample.

Course Requirements

Thirty credit hours of course work distributed as follows:

- AFRI-A731 African Studies Interdisciplinary Graduate Seminar (3 cr.)
- AFRI-A732 Bibliography of Sub-Saharan Africa (3 cr.)
- AFRI-A650 Interdisciplinary Research Methods (3 cr.)
- AFRI-A651 Independent Research / Directed Readings (up to 6 cr.); and elective courses organized around a topical or regional concentration to complete a total of 30 credits.

Elective courses are to be selected from the range of cross-listed African Studies offerings in the College of Arts and Sciences and several professional schools, with the approval of the student's major advisor. Electives may include three additional credits of AFRI-A731 since the topic for the African Studies Interdisciplinary Graduate Seminar changes every semester and is offered by different faculty members on a rotating basis.

Language Requirement

At least four semesters of an African language. Students may have the language requirement waived by demonstrating equivalent competence through an examination completed under supervision of the African Languages Coordinator. Up to three credits for the study of an African language beyond the second year level may count toward the electives.

M.A. Committee and Thesis

Students are required to constitute a committee composed of a disciplinary advisor and two additional members with relevant regional or topical expertise, approved by the director of the African Studies Program. Committee members must be selected from African Studies affiliate faculty with professional experience on the African continent. The purpose of the committee is to provide consultation to the student as needed and to read/comment on the master's thesis. There is no M.A. examination option.

The M.A. thesis should be an in-depth treatment of the chosen topic, interdisciplinary in nature and 70 to 100 double-spaced pages in length. It may be an expanded seminar paper or an entirely new project based on library, archival, field, or museum research, and should make use of relevant sources in a language other than English. All three committee members must approve the thesis but may agree to waive an oral defense.

Dual M.A./M.L.S. in African Studies and Library Science

The College of Arts and Sciences African Studies Program and the School of Library and Information Science jointly offer a three-year program that qualifies students for a dual master's degree (M.A./M.L.S.). The program responds to the growing need for librarians with Africa-specific knowledge and research experience in the humanities and social sciences. The dual M.A./M.L.S. program requires completion of a minimum of 56 credit hours of graduate coursework and the two degrees must be awarded simultaneously. Students will be assigned a mentor/advisor from each unit. The student's African Studies M.A. thesis committee should include a representative of the SLIS faculty or other means of including perspectives of both programs.

Admission Requirements

Same as for the College of Arts and Sciences Master of Arts in African Studies degree, except that students must also apply to the master's program of the School of Library and Information Science and meet its established

admissions criteria. Students must be accepted by both units in order to be admitted to the program.

African Studies Core Requirements

A minimum twenty-six hours of coursework distributed as follows:

- AFRI-A731 African Studies Interdisciplinary Graduate Seminar (3 cr.)
- AFRI-A732 Bibliography of Sub-Saharan Africa (3 cr.)
- AFRI-A650 Interdisciplinary Research Methods (3 cr.) At least twelve credit hours of elective courses organized around a topical or regional concentration
- AFRI-A651 Independent Research/Directed Readings (up to 6 cr.) toward the M.A. thesis

Elective courses are to be selected from the range of cross-listed African Studies offerings in the College of Arts and Sciences and several professional schools, with the approval of the student's major advisor.

Electives may include three additional credits of AFRI-A731, since the topic for the African Studies Interdisciplinary Graduate Seminar changes every semester and is offered by different faculty members on a rotating basis.

Library and Information Science Course Requirements

Thirty credit hours of coursework consisting of:

1. 15 credits of M.L.S. foundation courses, with S552 Academic Library Management to fulfill the management and leadership skills requirement;
2. 3 credits of either S521 Information in the Humanities or S522 Social Science Information; and
3. 12 credits of elective courses chosen in consultation with the student's SLIS advisor. An internship related to African Studies is strongly advised.

Language Requirement

Same as for the M.A. in African Studies.

See also: www.slis.indiana.edu/degrees/joint/africa.html

Dual M.A./M.P.H. African Studies and Public Health

The College of Arts and Sciences' African Studies Program and the School of Health Physical Education & Recreation (HPER) propose to jointly offer a three-year program that qualifies students for a dual master's degree (M.A./M.P.H). The proposed program is a response to the growing need for public health personnel with Africa-specific knowledge and research experience in the humanities and social sciences. The dual M.A./M.P.H program requires completion of a minimum of 67 credit hours of graduate course work and the two degrees must be awarded simultaneously. Students will be assigned a mentor or an advisor from each unit. The student's thesis committee must include a representative from each academic unit who will serve as Co-Chairs of the thesis project.

Admissions Requirements

Same as for the College of Arts and Sciences Master of Arts in African Studies degree except that students must also apply to the master's program of the School of Health Physical Education & Recreation (HPER) and meet its established M.P.H admissions criteria. Students must be accepted for admission to both units in order to be admitted to the program.

Other Stipulations

Students must pass all routine requirements of the MPH program including satisfactory performance on the C650 Culminating Experience in addition to the completion of the master's thesis.

DEGREE REQUIREMENTS (67 Credits)

Public Health Core Courses (15 Credits)

- HPER-C 589 Social and Behavioral Determinants of Health (3cr.)
- HPER-C 591 Public Health Statistics (3 cr.)
- HPER-C 512 Environmental Health Science (3 cr.)
- HPER-C 611 Epidemiology (3 cr.)
- HPER-C 510 Organization and Administration of Public Health Programs (3 cr.)

African Studies Core Courses (9 Credits)

- AFRI-A 731 African Studies Interdisciplinary Graduate Seminar (3 cr.)
- AFRI-A 732 Bibliography of Sub-Saharan Africa (3 cr.)
- AFRI-A 650 Interdisciplinary Research Methods (3 cr.)

Public Health Required Courses (22 Credits)

- HPER-C 505 Public Health Foundations & Leadership (3 cr.)
- HPER-C 501 Assessment & Planning in Public Health (3 cr.)
- HPER-H 594 Health Program Evaluation (3 cr.)
- HPER-C 602 Intervention Design (3 cr.)
- HPER-C 529 Health and Disease in Diverse Communities (3 cr.)
- HPER-C 650 Culminating Experience (2 cr.)
- HPER-C 644 Field Experience in Public Health (5 cr.) (prerequisite: GPA of at least 3.0)

Language (6 Credits)

Minimum six credits of African Language. Up to three (3) credits for the study of an African Language beyond the second year level may count toward the electives.

Electives (9 Credits)*

Either

- African Studies Electives (6 Credits Minimum)
- HPER Electives With Africa Focus (3 Credits Minimum)

Or

- African Studies Electives (9 Credits Minimum)
- Independent Research and Thesis (6 Credits)
- AFRI A-651 Independent Research (6 Credits)

*African Studies elective courses are to be selected from the range of cross-listed African Studies offerings in the College of Arts and Sciences and several professional schools, with the approval of the student's major advisor. Electives may include three additional credits

of AFRI A-731 since the topic for the African Studies Interdisciplinary Graduate Seminar changes every semester and is offered by different faculty members on a rotating basis. HPER elective courses may include any elective within the School of HPER that complements an area of topical or methodological focus.

Dual M.A./M.P.A. African Studies and Public Affairs

Academic programs in African Studies continue to grow, with a corresponding need for scholars in Public Affairs who have knowledge and research experience in the humanities, social science, policy, and management aspects of this field. The dual M.A. /M.P.A. program requires completion of a minimum of 62 credit hours of graduate course work. Students must apply for admission to the master's programs of both the School of Public and Environmental Affairs (Public Affairs) and the College of Arts and Sciences (African Studies Program), and meet the admissions criteria established for each. Students will be assigned a mentor from each unit until they form an M.A.-M.P.A. thesis committee which should be co-directed by a faculty member from each unit. The two degrees must be awarded simultaneously.

Admissions Requirements

Same as for the College of Arts and Sciences Master of Arts in African Studies degree, except that students must also apply to the master's program of the School of Public and Environmental Affairs and meet its established admissions criteria. Students must be accepted by both units in order to be admitted to the program. The deadline for receipt of application materials for the African Studies component is January 15. Please contact the School of Public and Environmental Affairs for deadlines and information on the SPEA master's program requirements and deadlines.

African Studies Course Requirements (26 credit hour minimum)

A. Required Courses (9 credits)

- A731 African Studies Interdisciplinary Graduate Seminar (3 credits)
- A732 Bibliography of Sub-Saharan Africa (3 credits)
- A650 Interdisciplinary Research Methods (3 credits)

B. Electives (12 credits minimum)

- Students should take elective courses organized around a topical or regional concentration. These courses are to be selected from the range of cross-listed African Studies offerings in the College of Arts and Sciences and several professional schools, with the approval of the student's major advisor. Electives may include up to three additional credits of A731 because the topic for the African Studies Interdisciplinary Graduate Seminar changes every semester and is offered by different faculty members on a rotating basis.

C. M.A. Thesis

- A651 Independent Research (up to 6 credits)

D. Language Requirement

- At least two years (four semesters) of an African language (up to 6 credits). Up to three (3) credits for the study of an African language beyond the second year level may count toward the electives.

SPEA Course Requirements

The core requirements for the M.P.A. and a specialized SPEA concentration (36 credit hours) to include:

A. M.P.A Foundation courses (18 credits):

- SPEA-V 502 Public Management (3 cr.)
- SPEA-V 506 Statistical Analysis for Effective Decision Making (3 cr.)
- SPEA-V 517 Public Management Economics (3 cr.)
- SPEA-V 540 Law and Public Affairs (3 cr.)
- SPEA-V 560 Public Finance and Budgeting (3 cr.)
- SPEA-V 600 Capstone in Public and Environmental Affairs (3 cr.).

B. Specialized Area

- Students may design and develop a program of specialization courses in consultation with SPEA faculty advisors (18 credits).

Language Requirement

Same as for the College of Arts and Sciences Master of Arts in African Studies degree.

Ph.D. Minor in African Studies

The African Studies program offers the Ph.D. Minor to students in the following fields: anthropology, archaeology, comparative literature, economics, English, education, fine arts, folklore, French, geography, history, instructional systems technology, journalism, law, linguistics, political science, public and environmental affairs, sociology, and Spanish and Portuguese.

Students selecting African studies as a minor should report to the program office (Woodburn Hall 221) as soon as possible after arriving on campus. The program director and staff will assist with orientation concerning courses, faculty, and students.

Course Requirements

Students minoring in African studies must complete AFRI-A732 Bibliography of Sub-Saharan Africa (to be taken, if possible, during the first year) and four other graduate-level courses in African studies outside their major field. The courses should be at least two different disciplines; must be taught by an African Studies Program affiliated faculty member; and must be approved by the Program director.

The African studies Interdisciplinary Seminar AFRI-A731 may be taken twice for a total of six credits but variable credit is only allowed in addition to having taken it once as a three-credit seminar.

One language course in the third year of study, or higher, may be counted toward the Minor.

The program strongly recommends that Ph.D. candidates who minor in African Studies take two years of an African language in addition to their course work for the minor. Serious scholars of Africa are proficient in at least one African language. Moreover, language proficiency improves opportunities for fieldwork and funding; in fact it is a requirement for important overseas study grants (e.g., SSRC and Fulbright-Hays awards).

Students preparing a minor in African Studies and a minor in another field may double-count only one course.

Students with special qualifications or previous course work at leading institutions may petition the Graduate Affairs Committee to give credit for work that is comparable to specific courses at Indiana University. Petitions must include a formal letter of request from the candidate, as well as a syllabus from the course in question. The materials should be submitted to the Chair of the Graduate Affairs Committee or the Director of the African Studies Program.

The requirements stated above constitute a minimum level of expectation.

Examination

Although a 3.7 grade point average in African studies courses would normally exempt the student from having to take a written comprehensive examination, the decision in this matter rests with the student's major-field advisor and the faculty member representing African studies as the minor-field advisor. Certifying that the student has met the minimum requirements rests with a faculty member in the African Studies Program who is not in the student's major department.

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Director and Graduate Advisor

Professor Samuel Obeng

Associate Director and Undergraduate Advisor

Maria Grosz-Ngate

Professors

Osita Afoaku (Clinical Professor of Public and Environmental Affairs), Akwasi B. Assensoh* (African American and African Diaspora Studies), Erna Alant* (Education), Robert Botne* (Linguistics), Mellonee Burnim* (Folklore and Ethnomusicology), Kevin Brown (Law), Claude Clegg* (History), Stuart Davis (Linguistics), Hasan El-Shamy* (Folklore, Near Eastern Languages and Cultures), Ann Elsner* (Optometry), Paula Girshick* (Anthropology), Matthew Guterl (African American and African Diaspora Studies), Kevin Hunt* (Anthropology), Eileen Julien* (African American and African Diaspora Studies, French and Italian, Comparative Literature), David Lohrmann* (Applied Health Science), Victor Malinovsky (Clinical Professor of Optometry), Portia Maultsby* (Folklore and Ethnomusicology), Audrey McCluskey (African American and African Diaspora Studies), Patrick McNaughton* (Fine Arts), Emilio Moran* (Rudy Professor, Anthropology), Samuel Gyasi Obeng* (Linguistics), Patrick O'Meara* (Political Science, Public and Environmental Affairs), Robert F. Port* (Computer Science, Linguistics), Jack D. Rollins (African Studies Program, English & Swahili), Iris Rosa (African American and African Diaspora Studies), Darlene Sadlier* (Spanish and Portuguese), Kathy Schick* (Anthropology), Jeanne Sept* (Anthropology), Suzanne Stetkevych* (Near Eastern Languages and Cultures), Beverly Stoeltje* (Anthropology, Communication and Culture), Ruth Stone* (Folklore), Mohammad Torabi* (Applied Health Science), Nicholas Toth* (Anthropology), David Williams* (Law), Richard Wilk* (Anthropology)

Associate Professors

Bonnie Brownlee (Journalism), Rowan Candy* (Optometry), Gracia Clark* (Anthropology), Maron Frank-Wilson (Adjunct Associate Professor of English), Michael Gasser* (Computer Science), Kenneth DeJong (Linguistics), Jane Goodman (Communications and Culture), Mary E. Grabe* (Telecommunications), Jane Grogg (Clinical Associate Professor), John H. Hanson* (History), Vivian Halloran (Comparative Literature), Patricia Henderson* (Optometry), Douglas Horner* (Optometry), Jim Kelly (Journalism), Don Lyon (Clinical Associate Professor of Optometry), Murray McGibbon (Theatre and Drama), Susan Middlestadt* (Applied Health Science), Martha Nyikos* (Education), Cecilia Obeng* (Applied Health Science), Alwiya Omar (Clinical Associate Professor of African Studies, Linguistics), Marissa Moorman* (History), Michael Reece* (Applied Health Science), Daniel Reed* (Folklore and Ethnomusicology), Richard Stryker* (Emeritus, Political Science), Suresh Viswanathan (Optometry), Margaret Sutton* (Education), Chalmer Thompson (Education), Edward Watts* (History)

Assistant Professors

Akinwumi Adesokan (Comparative Literature), Heather Akou (Apparel Merchandising), Beth Buggenhagen (Anthropology), Ona Fernando* (Applied Health Science), Maria Grosz-Ngaté (Adjunct Assistant Professor of Anthropology, Academic Specialist in African Studies), Kevin Houston (Clinical Assistant Professor, Optometry), Kimberly Kohne (Clinical Assistant Professor, Optometry), Pete Kollbaum (Optometry), Lauren Morris MacLean* (Political Science), Michelle Moyd (History), Todd Peabody (Clinical Assistant Professor, Optometry), Diane Pelrine (Art History), Jeffrey Perotti (Clinical Assistant Professor of Optometry), Nicholas Port (Optometry), Beth Samueleson* (Education), Ahmed Youssefagha* (Applied Health Science)

Emeriti

Robert Arnove* (Emerita, Chancellor's Professor, Education), Salih Altoma* (Emeritus, Near Eastern Languages and Cultures), Randall Baker* (Public and Enviornmental Affairs), George E. Brooks Jr.* (Emeritus, History), Trevor Brown* (Emeritus, Journalism), Mary Goetze* (Emeritus, Music), Phyllis Martin* (Emerita, Ruth N. Halls Professor, History), Robert Port (Emeritus, Linguistics), Heitor Martins* (Emeritus, Spanish and Portuguese), Christine Ogan* (Journalism), Robert F. Port* (Computer Science, Linguistics), David Thelen* (Emeritus, History), William Wiggins Jr.* (Emeritus, African American and African Diaspora Studies, Folklore), John W. Johnson* (Emeritus, Folklore), Patrick Munson* (Emeritus, Anthropology), Richard Stryker* (Emeritus, Political Science)

Academic Advising

Woodburn Hall 221, (812) 855-8284

Courses

AFRI–A 500 Advanced Topics in African Studies (1-4 cr.) Advanced and intensive study of selected topics in African Studies. To include topics not ordinarily covered by existing African Studies Program courses. May not duplicate a regularly offered course.

AFRI–L 400 Topics in African Studies (3 cr.)

AFRI–OS 500 Undistributed Overseas Credit (1-3 cr.)

AFRI–A 650 Interdisciplinary Research Methods (3 cr.) Prepares students to conduct scholarly research and social-impact analysis in Africa as well as design and implement project focused on contemporary issues in areas ranging from development and the environment to health and politics. Also provides students with the background for assessing the results of already completed studies.

AFRI–A 651 Independent Research / Directed Readings (1-3 cr.) Individually designed course in preparation for and writing of M.A. thesis. Must be directed by an African Studies faculty affiliate and approved by the student's disciplinary advisor and the African Studies Program director. May include fieldwork in Africa and/or research in museums, archives, and libraries.

AFRI–A 689 Independent Project in Black Literature (3 cr.)

AFRI–A 731 Seminar on contemporary Africa (1-3 cr.) Offered by African Studies faculty across the disciplines on variable topics.

AFRI–A 732 Bibliography of Sub-Saharan Africa (3 cr.) Introduction to the bibliography of Africa south of the Sahara, covering major reference works and bibliographies; regional, trade, and national bibliographies; government publications, social sciences, humanities, statistics, rare books, manuscripts, and online databases. Compilation of a comprehensive bibliography required.

GRAD–I 701 Multidisciplinary Seminar on Issues and Approaches in Global Studies (3 cr.)

Cross-Listed Courses

Anthropology

- A303 Evolution and Prehistory (3 cr.)
- B464 Human Paleontology (3 cr.)
- E510 Problems in African Ethnography and Ethnology (3 cr.)
- E523 Life Histories (3 cr.)
- E600 Seminar in cultural and Social Anthropology [African topics] (3 cr.)
- E616 Anthopology of Tourism (3 cr.)
- E617 African Women (3 cr.)
- E620 Seminar in Cultural Ecology (3 cr.)
- E650 African Systems of Thought (1-3 cr.)
- E660 Arts in Anthropology (3 cr.)
- E675 Law and Culture (3 cr.)
- E667 Performing Nationalism (3 cr.)
- E668 Ritual, Festical, and Public Culture (3 cr.)
- E690 Development and Anthropology (3 cr.)
- P314 Early Prehistory of Africa (3 cr.)
- P315 Late Prehistory of Africa (3 cr.)
- P600 Seminar in Prehistoric Anthropology (3 cr.)

Apparel Merchandising

- H401 Cultural Aspects of Dress (3 cr.)

Comparative Literature

- C572 Modern AFrican Letters (4 cr.)
- C611 Topics in Literary Genres, Modes, and Forms (African topics] (4 cr.)

Economics

- E592 Economic Development of Less-Developed Countries (3 cr.)

Education

- H520 Education and Social Issues (3 cr.)
- H551-H552 Comparative Education I-II (3-3 cr.)
- H560 Education and Change in Societies (3 cr.)
- H620 Seminar in Educational Policy Studies (3 cr.)
- H637 Policy Assessment and Evaluation (3 cr.)
- R640 Planning Educational Media Systems: National and International (3 cr.)

Fine Arts

- A453 Art of Sub-Saharan Africa (4 cr.)
- A552 Art of Eastern and Southern Africa (3 cr.)
- A556 Art of Central Africa (3 cr.)
- A650 Problems in African Art (4 cr.)
- Folklore and Ethnomusicology
- F501 Folklore Colloquium (3 cr.)
- F516 Proseminar in Folklore Theory and Method I: Materials of Folklore (3 cr.)
- F522 Field Work in Folklore/Ethnomusicology (3 cr.)
- F574 Seminar in Ethnomusicology: Transcription and Analysis (3 cr.)
- F607 Music in African Life (3 cr.)
- F608 Music in African film (3 cr.)
- F609 Folklore and African American Foklore/Folk Music (3 cr.)
- F617 Middle East Folklore/Folk Music (3 cr.)
- F694 Black Music in America (3 cr.)
- F714 Paradigms of Ethnomusicology (3 cr.)
- F740 History of Ideas in Folklore/Ethnomusicology (3 cr.)
- F750 Performance Studies (3 cr.)
- F755 Folklore, Culture, and Society (3 cr.)

French

- F667 Studies in Francophone Literature (3 cr.)

Geography

- G604 Seminar in Environmental Geography (3 cr.)

History

- E531 African History from Ancient Times to Empires and City States (3 cr.)
- E532 African History from Colonial Rule to Independence (3 cr.)
- E533 Conflict in Southern Africa (3 cr.)
- E534 History of Western Africa (3 cr.)
- E536 History of East Africa (3 cr.)
- E538 History of Muslim West Africa (3 cr.)

- H695 Colloquium in African History (4 cr.)
- H795 Seminar in African History (4 cr.)

Journalism

- J514 International Communication (3 cr.)
- J614 Communication and National Development (3 cr.)

Linguistics

- A501 Introduction to African Linguistics (3 cr.)
- A502 Language in Africa (3 cr.)
- A503 Bantu Linguistics (3 cr.)
- A504 Chadic Linguistics (3 cr.)
- A747 Seminar in Afican Linguistics (4 cr.)
- L619 Language in Society (3 cr.)
- L653-L654 Field Methods in Linguistics I-II (3-3 cr.)
- Near Eastern Languages and Cultures
- N409 Modern Arabic Literature (3 cr.)
- N480 Modern Arabic Poetry (3 cr.)
- N541 Arabic Theatre (3 cr.)
- **Political Science**
- Y343 Development Problems in the Third World (3 cr.)
- Y657 Comparative Politics [African Politics] (3 cr.)
- Y673 Empirical Theory and Methodology [African topics] (3 cr.)

Public and Environmental Affairs

- V524 Civil Society in Comparative Perspective (3 cr.)
- V574 Environmental Management in the Tropics (3 cr.)
- V575 International and Comparative Administration (3 cr.)
- V578 Introduction to Comparative and International Affairs (3 cr.)
- V596 Sustainable Development (3 cr.)
- V699 Economic Development, Globalization, and Entrepreneurship (3 cr.)

Spanish and Portuguese

- P500-501 Literatures of the Portuguese-Speaking World I-II (3 cr.)
- P515 Women Writing in Portuguese (3 cr.)
- P520 Literatures of the Portuguese-Speaking World in Translation (3 cr.)
- P710 Seminar: African Literature in Portuguese (3 cr.)

Courses in African Languages-Linguistics

- B101-B102 Elementary Bambara I-II (3-3 cr.)1
- B201-B202 Intermediate Bambara I-II (3-3 cr.)
- B301-B302 Advanced Bambara I-II (3-3 cr.)
- K501-502 Elementary Akan I-II (3-3 cr.)
- K601-602 Intermediate Akan I-II (3-3 cr.)
- K701-702 Advanced Akan I-II (3-3 cr.)
- S101-S102 Elementary Swahili I-II (3-3 cr.)1
- S201-S202 Intermediate Swahili I-II (3-3 cr.)
- S301-S302 Advanced Swahili I-II (3-3 cr.)
- X101-102 Elementary Wolof I-II (3-3 cr.)
- X201-202 Intermediate Wolof I-II (3-3 cr.)
- X701-Z702 Advanced Wolof I-II (3-3 cr.)
- Z501-Z502 Elementary Zulu I-II (3-3 cr.)
- Z601-Z602 Intermediate Zulu I-II (3-3 cr.)
- Z701-Z702 Advanced Zulu I-II (3-3 cr.)

Near Eastern Languages and Cultures

- A500-A550 Elementary Arabic I-II (2-2 cr.)
- A600-A650 Intermediate Arabic I-II (3-3 cr.)
- A660-A670 Advanced Arabic I-II (3-3 cr.)

Other African Languages

- F101-102 Elementary African Languages I-II [variable language] (3-3cr.)
- F201-202 Intermediate African Languages I-II [variable language] (3-3cr.)
- F301-302 Advanced AFrican Languages I-II [variable language] (3-3cr.)

* Four (4) credits each semester for undergraduates.

American Studies

College of Arts and Sciences
Curriculum

Departmental E-mail: amst@indiana.edu

Departmental URL: http://www.indiana.edu/~amst

Program Information

For additional graduate student information, contact Ballantine Hall 521, phone (812) 855-7718, fax (812) 855-0001.

Degrees Offered

Doctor of Philosophy, a combined degree program in American Studies and another discipline (including but not limited to: African American and African Diaspora Studies, anthropology, art history, communication and culture, comparative literature, criminal justice, education, English, folklore, gender studies, history, history of education, journalism, law, philosophy, political science, religious studies, sociology, Spanish, telecommunications, theatre and drama).

The American Studies Program provides an opportunity to pursue the interdisciplinary study of American society and culture. In the program, students acquire specialized training in one particular discipline as well as firm grounding in interdisciplinary study. They are encouraged to shape portions of their graduate studies to fit individual needs and interests. Courses in the program are also open to graduate students pursuing a master's degree in another department, special nondegree graduate students, and international students.

Special Program Requirements

See also general University Graduate School requirements.

Doctor of Philosophy Degree

Admission Requirements

Acceptance into the American Studies Program is contingent upon prior admission by the home department. Students should apply, indicating a desire to pursue the combined doctoral degree in their statement of purpose, which is to be submitted with the application. A copy of the statement of purpose and a letter indicating your

interests should be sent to the American Studies Program Admissions Committee. Deficiencies in background may be removed by completing specified courses.

Course Requirements

A minimum of 90 credit hours, of which 32 must be in American Studies, 20 hours of core courses including G603 (4 cr.), G604 (4 cr.), G751 (3-4 cr.), and eight additional credit hours, such as G605 (4 cr.), G620 (3-4 cr.), G697 (1-6 cr.), G753 (1-4 cr.), or cross-listed and joint-listed courses taught by American Studies faculty members outside the student's home department. The 32 credit hours may include 12 credit hours of appropriate courses relevant to American Studies inside the student's home department. Strong encouragement is given to interdisciplinary diversification. The dissertation (minimum of 15 credit hours) should reflect interdisciplinary study and research.

Advisory and Research Committees

The Graduate School requires that students pursuing a combined Ph.D. have at least four faculty members on their advisory and research committees, with two from each of the major fields (see the General Requirements chapter in the Graduate Bulletin). While AMST-affiliated faculty in a student's home department can serve as representatives of American Studies, the program additionally requires that at least one of the AMST representatives on the committee be from outside of the student's home department.

Qualifying Examination

Students in the combined Ph.D. degree program must take a comprehensive written examination in the field of American Studies in addition to the qualifying examination given in the student's home department. The examination is to be taken after completion of the American Studies course requirements. The examination may be repeated only once.

Final Examination

The oral defense of the dissertation will be conducted jointly with the student's home department. At least two members of the American Studies faculty must be on the student's dissertation committee.

Ph.D. Minor in American Studies

Students choosing American Studies as a minor (minimum 12 credit hours) in their doctoral program must complete G603, G751, and either G604, G605, G620, G697, 4 credit hours in G753, or a cross-listed course outside their home department that has been approved by the program director.

Ph.D. Minor in Native American and Indigenous Studies

Students who pursue the Ph.D. minor in Native American and Indigenous Studies will focus their interdisciplinary study on the histories, cultures, and literatures of Native American and Indigenous peoples, chiefly in the United States, Mexico, and Canada, but also, where appropriate, in the broader Americas. This is one of a very few programs in the United States that focuses explicitly on Native American and Indigenous Studies at the graduate level, and that places the study of American Indians within the context of a broader, more sweeping and international inquiry into the nature of political power, colonial settlement, and global contact.

Program of Study

Students are required to submit a "Program of Study" to an affiliated American Studies faculty member for final approval. After approval, a signed copy should be sent to the Director. The Program of Study will provide the rationale for the student's proposed curriculum and will list the courses, with alternative selections in the event such courses are not offered on a timely basis that will serve as the student's minor program. With the Director's approval, the student will become officially enrolled in the Native American and Indigenous Studies degree.

Requirements

Requirements for the Native American and Indigenous Studies Ph.D. minor encourage graduate students to develop a program of academic inquiry that complements their doctoral program and takes advantage of the wide range of College of Arts and Sciences faculty with a focus on Native American and Indigenous literature, politics, art, history, culture, and folklore. Students must complete at least 12 credits of coursework, including G605, "Introduction to Native American and Indigenous Studies," which is required. The remaining credits can come from any other American Studies course offered by faculty outside of the student's home department, including G620, "Colloquium in American Studies," with relevant Native or Indigenous content, and a section of G751, "Seminar in American Studies," with relevant Native or Indigenous content, or G753, "Independent Study in American Studies, also with relevant Native or Indigenous content.

For a list of affiliated faculty, students should consult: http://www.indiana.edu/~amst/graduates/native.shtml.

Faculty

Core Faculty

Director

Matthew Pratt Guterl*

Associate Director

Deborah Cohn*

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Associate Professor

Deborah Cohn*

Assistant Professors

Denise Cruz (English, American Studies), Susan Lepselter (American Studies, Communication and Culture), Jason McGraw (American Studies, History), Micol Seigel (African American and African Diaspora Studies, American Studies), Stephen Selka (African American and African Diaspora Studies, American Studies), Christina Snyder (American Studies, History)

Lecturer

Karen Inouye (American Studies)

Affiliated Faculty

Distinguished Professor

David Baker Jr. (Music)

Chancellors' Professors

John Bodnar* (History), Raymond J. DeMallie* (Anthropology)

College Professor

Henry Glassie* (Emeritus, Folklore)

Professors

Judith Allen* (History, Gender Studies), Patrick Baude* (Emeritus, Law), Richard Bauman* (Emeritus, Folklore), Mellonee Burnim* (Folklore and Ethnomusicology), Sarah Burns* (Fine Arts), Claude Clegg* (History), Stephen Conrad* (Law), Sandra Dolby* (Folklore and Ethnomusicology), Ellen Dwyer* (Criminal Justice), Jonathan Elmer* (English), Wendy Gamber* (History), Jesse Goodman* (Education), Michael Grossberg* (History), Karen Hanson* (Philosophy), Russell Hanson* (Political Science), Raymond Hedin* (English), David Hertz* (Comparative Literature), George Hutchinson* (English), Christoph Irmscher* (English), Jeffrey Isaac* (Political Science), Robert Ivie* (Communication and Culture), Barbara Klinger* (Communication and Culture, Film Studies), Edward T. Linenthal* (History), John Lucaites* (Communication and Culture), James Madison* (History), Michael Martin (African American and African Diaspora Studies), Portia Maultsby* (Folklore and Ethnomusicology), John McCluskey Jr.* (Emeritus, African American and African Diaspora Studies), Michael McGerr* (History), Richard B. Miller* (Religious Studies), David P. Nord* (Journalism), Carol Polsgrove* (Emeritus, Journalism), Darlene Sadlier* (Spanish and Portuguese), John Stanfield (African American and African Diaspora Studies), Beverly Stoeltje* (Anthropology, Communication and Culture), Steven Stowe* (History), Gregory Waller* (Communication and Culture), Pamela Walters* (Sociology), Vernon J. Williams (African American and African Diaspora Studies)

Associate Professors

Christopher Anderson* (Communication and Culture), Purnima Bose* (English), Candy Gunther Brown* (Religious Studies), James Capshew* (History and Philosophy of Science), Deborah N. Cohn* (Spanish and Portuguese), Claude Cookman* (Journalism), Nick Cullather* (History), Mark Deuze* (Telecommunications), Konstantin Dierks* (History), Judith Failer* (Political Science), Valerie Grim* (African American and African Diaspora Studies), Matt Guterl* (African American and African Diaspora Studies), Paul Gutjahr* (English), Vivian Halloran* (Comparative Literature), Joan C. Hawkins* (Communication and Culture), Jeffrey Huntsman* (Emeritus, English), Jason Jackson* (Folklore), Stephanie Kane* (Criminal Justice), DeWitt Kilgore* (English), Sarah Knott* (History), Audrey McCluskey (African American and African Diaspora Studies), Fred McElroy (African American and African Diaspora Studies), John Nieto-Phillips* (History), Radhika Parameswaran* (Journalism), Phaedra Pezzullo* (Communication and Culture), Stephen Russell* (Emeritus, Criminal Justice), Eric Sandweiss* (History), Susan Seizer* (Communication and Culture), Dennis Senchuk* (Philosophy), Robert Terrill* (Communication and Culture)

Assistant Professors

Sonya Atalay (Anthropology), Marlon Bailey* (African American and African Diaspora Studies, Gender Studies), Karen Bowdre (Communication and Culture), Judah Cohen (Folklore and Ethnomusicology, Jewish Studies), Serafin M. Coronel-Molina* (Education), Stephanie DeBoer (Communication and Culture), Ilana Gershon (Communication and Culture), Mary L. Gray* (Communication and Culture), Terrill (Scott) Herring* (English), Colin Johnson* (Gender Studies), Michael Kaplan (Communication and Culture), Khalil G. Muhammad (History), Amrita Myers* (History), Laura Scheiber* (Anthropology), Marvin D. Sterling (Anthropology), Ted Striphas* (Communication and Culture), Shane Vogel* (English), Brenda Weber* (Gender Studies), Ellen Wu (History), Tarajean Yazzie-Mintz (Education)

Lecturer

Frank Hess (West European Studies)

Courses

AMST–G 603 Introduction to American Studies (4 cr.) Representative readings in interdisciplinary scholarship; the origins and the development of American Studies and current trends.

AMST–G 604 Perspectives in American Studies (4 cr.) Survey of perspectives that have been and currently are significant in American Studies.

AMST–G 605 Introduction to Native American and Indigenous Studies (4 cr.) This is an introductory course in the interdisciplinary study of Native peoples, with primary focus on the study of indigenous peoples in the continental U.S., Alaska, and Canada.

AMST–G 620 Colloquium in American Studies (3–4 cr.) Readings, reports, and discussions on different aspects of American culture. Topics and instructors will change each time the course is offered.

AMST–G 697 Foreign Research in American Studies (1–6 cr.) The class will approach the study of the United States or the Americas from a hemispheric, transnational, or global perspective, with significant reading, writing, and fieldwork for each participating student.

AMST–G 751 Seminar in American Studies (3–4 cr.) R: G620. Intensive study of specific topics in American culture and history with emphasis on developing skills in interdisciplinary research. These seminars will culminate in a 20+-page research paper. Topics and instructors will change each time the seminar is offered.

AMST–G 753 Independent Study (1–4 cr.) P: Consent of the director of American Studies and of instructor, who must be a member of the American Studies faculty.

AMST–G 901 Advanced Research (6 cr.)

Ancient Studies

College of Arts and Sciences Curriculum

Ph.D. Minor in Ancient Studies

The program in Ancient Studies seeks to encourage the study of antiquity in all its facets—including its history, art, architecture, literature, music, philosophy, religion, and science—and to promote interdisciplinary approaches to ancient culture. The program draws on the faculty of 12 departments: Anthropology, Central Eurasian Studies, Classical Studies, Comparative Literature, Fine Arts, Geological Sciences, History, History and Philosophy of Science, Jewish Studies, Musicology, Philosophy, and Religious Studies. The minor in Ancient Studies aims to help students expand the depth and scope of their knowledge of ancient cultures and learn about different approaches to them. To promote these ends, it permits students to draw on courses from two or more departments outside of their home department. A student might choose to group together courses from different departments that focus on a certain period (e.g., late antiquity) or topic (e.g., social history).

Course Requirements

Students must complete 12 graduate credit hours of appropriate courses outside their home department. These courses must be in at least two different departments. No more than 3 credit hours of directed readings can be applied to the minor. No more than 6 credit hours of language study may count toward the minor, all of which must be above the elementary level. The minor advisor (Edward Watts, ejwatts@indiana.edu) must approve the particular courses that are to be counted toward the minor.

Grades

Courses in which a student receives less than a B (3.0) will not count toward the minor.

Faculty

Director

Associate Professor Edward Watts* (History)

Departmental E-mail: ejwatts@indiana.edu

Departmental URL: www.indiana.edu/~ancient

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

David Brakke* (Religious Studies), Jamsheed Choksy* (Central Eurasian Studies), Matthew Christ* (Classical Studies), Geoffrey W. Conrad* (Anthropology), James Franklin* (Classical Studies), J. Albert Harrill* (Religious Studies), Eleanor W. Leach* (Classical Studies), Thomas Mathiesen* (Music), Betty Rose Nagle* (Classical Studies), William Newman* (History and Philosophy of Science), Anne Pyburn* (Anthropology)

Associate Professors

Bridget Balint (Classical Studies), Cynthia Bannon* (Classical Studies), Sarah Bassett (Fine Arts) James G. Brophy* (Geological Sciences), Herbert Marks* (Comparative Literature), Eric Robinson* (History), Stephen Vinson* (Near Eastern Languages and Cultures), Julie Van Voorhis* (Fine Arts), Edward Watts* (History)

Assistant Professors

Deborah Deliyannis* (History), Madeline Goh (Classical Studies), Margaretha Kramer-Hajhos (Classical Studies), Jonathan Ready (Classical Studies), Shun-Chang Kevin Tsai (Comparative Literature)

Professors Emeriti

Paul Eisenberg* (Philosophy), William Hansen* (Classical Studies), Timothy Long* (Classical Studies), Michael Morgan* (Philosophy), K. D. Vitelli* (Anthropology)

Courses

Classical Studies

C405 Comparative Mythology (4 cr.)
C409 Roman Literature and Art (3 cr.)
C411 (Fine Arts A411) The Art and Archaeology of Anatolia (4 cr.)
C412 (Fine Arts A412) The Art and Archaeology of the Aegean (4 cr.)
C413 (Fine Arts A413) The Art and Archaeology of Greece (4 cr.)
C414 (Fine Arts A414) The Art and Archaeology of Rome (4 cr.)
C416 Ovidian Mythology and its Tradition (3 cr.)
C419 The Art and Archaeology of Pompeii (4 cr.)
C501 Introduction to Graduate Study: Literary and Cultural Theory for Classicists (3 cr.)
C503 The Ancient City (4 cr.)
C610 Seminar in the Greek and Roman Novels (4 cr.)
C623 Seminar in Classical Archaeology (4 cr.)
G510 Readings in Greek Historians (4 cr.)
G511 Readings in Greek Oratory and Rhetoric (4 cr.)
G512 Readings in Greek Philosophers (4 cr.)
G513 Readings in the Greek Novel (3 cr.)
G516 Readings in Greek Comedy (4 cr.)
G517 Readings in Greek Tragedy (4 cr.)
G518 Readings in Greek Epic (4 cr.)
G536-G537 Survey of Greek Literature I-II (4-4 cr.)
G540 Readings in Byzantine Greek (4 cr.)
G601 Seminar in Greek Poetry (4 cr.)
G603 Seminar on Greek Tragedy (4 cr.)
G610 Seminar in the Greek Novel (4 cr.)
G611 Seminar in Greek Epigraphy, Papyrology, and Paleography (4 cr.)
G620 Seminar in Historical Texts and Historiography (4 cr.)
L509 Cicero, His Life and Works (4 cr.)
L510 Readings in Latin Historians (4 cr.)
L511 Readings in Latin Oratory and Rhetoric (4 cr.)
L513 Readings in the Roman Novel (4 cr.)
L515 Readings in Latin Elegy (4 cr.)
L530 Roman Rhetoric and Oratory (4 cr.)
L536-L537 Survey of Latin Literature I-II (4-4 cr.)
L540 Medieval Latin (4 cr.)
L550 Roman Historians (4 cr.)
L600 Seminar in Latin Epic (4 cr.)
L602 Seminar in Latin Comedy (4 cr.)

L603 Seminar in Latin Tragedy (4 cr.)
L610 Seminar in the Roman Novel (4 cr.)
L620 Seminar in Latin Historical Texts and Historiography (4 cr.)

Fine Arts

A410 History and Methodology of Classical Archaeology (4 cr.)
A411 (Classics C411) The Art and Archaeology of Anatolia (4 cr.)
A412 (Classics C412) The Art and Archaeology of the Prehistoric Aegean (4 cr.)
A413 (Classics C413) The Art and Archaeology of Greece (4 cr.)
A414 (Classics C414) The Art and Archaeology of Rome (4 cr.)
A416 Greek Architecture (4 cr.)
A418 Roman Architecture (4 cr.)
A513 Greek Vase Painting (4 cr.)
A514 Greek Sculpture: Fifth Century (4 cr.)
A516 Greek Sculpture: Hellenistic (4 cr.)
A517 Early Italian and Etruscan Art (4 cr.)
A518 Roman Sculpture (4 cr.)
A519 Roman Painting (4 cr.)
A611 Problems in Prehistoric Aegean Archaeology (4 cr.)
A612 Problems in Greek Archaeology (4 cr.)
A613 Problems in Greek Architecture (4 cr.)
A614 Problems in Greek Sculpture (4 cr.)
A615 Problems in Greek Painting (4 cr.)
A616 Problems in Roman Art (4 cr.)

History

C386 Greek History (3 cr.)
C388 Roman History (3 cr.)
C580 History of Ancient Medicine (3 cr.)
H605 Colloquium in Ancient History (4 cr.)
H705 Seminar in Ancient History (4 cr.)

History and Philosophy of Science

X556 Philosophy of Science in Antiquity (3 cr.)
X601 Seminar in Ancient Science (3 cr.)

Philosophy

P511 Plato (3 cr.)
P512 Aristotle (3 cr.)
P595 Intensive Reading: Ancient Philosophy from the Greek or Latin Texts (cr. arr.)

Religious Studies

R521 Studies in Early Christianity (3 cr.)
R535 Studies in Greco-Roman Religion (3 cr.)
R610 Studies in Biblical Literature and Religion (3 cr.)
R620 Ancient and Medieval Christianity (3 cr.)
R633 Colloquium in Ancient Religions (4 cr.)
R713 Historical Studies in Western Religions (3 cr.)

Animal Behavior

Departmental E-mail: cisab@indiana.edu

Departmental URL: www.indiana.edu/~animal

Curriculum

Admission Requirements

Students must be admitted to a Ph.D. program in the Department of Biology, the Department of Psychology, or the program in Neuroscience or other related departments or programs (e.g., program in Medical Sciences, Anthropology, History and Philosophy of Science). They must also apply to the program in Animal Behavior.

Students should select an advisory committee made up of at least three members of the graduate faculty. For students whose home department or program is Biology, at least one member of the advisory committee from the Department of Psychology or the program in Neuroscience is expected. For students whose home department or program is the Department of Psychology or the program in Neuroscience, at least one member of the advisory committee from Biology is expected. At least two of the student's committee members must be members of the program in Animal Behavior.

Ph.D. Minor in Animal Behavior

Course Requirements

At least FOUR courses taken from at least two different departments/graduate programs, as specified below:

(1) ONE ABEH A501 Seminar in the Integrative Study of Animal Behavior

(2) ONE course from the following list, emphasizing mechanisms of behavior:

- NEUS N500 Neural Science I
- NEUS N501 Neural Science II
- NEUS N550 Seminar in Sensorimotor Neuroplasticity
- BIOL L560 Physiological Ecology
- MED P548 Neuroethology

(3) ONE course from the following list, emphasizing evolutionary perspectives:

- ANTH B568 Evolution of Primate Social Behavior
- ANTH B600 Evolutionary Theory of Anthropology
- BIOL L567 Evolution
- BIOL L573 Quantitative Genetics and Microevolution
- BIOL L581 Behavioral Ecology
- BIOL Z540 Population Genetics

(4) ONE additional course from above or from the list below:

- BIOL L505 Evolution and Development
- BIOL Z460 Ethology
- BIOL Z466 Endocrinology
- COGS Q551 Brain and Cognition
- COGS Q700 Theoretical Issues in Animal Cognition
- MED P561 Comparative Animal Physiology
- PSY P417 Animal Behavior
- PSY P504 Learning and Motivation
- PSY P526 Neurobiology of Learning and Memory
- PSY P527 Developmental Psychobiology
- PSY P717 Evolutionary Bases of Learning

Examination

As required by home department or program.

Graduate Area Certificate in Animal Behavior

Course Requirements

The requirements for the Area Certificate in Animal Behavior include all of the requirements of the minor, plus the following:

1. One additional ABEH A501 Seminar in the Integrative Study of Animal Behavior
2. ABEH A502 Professional Ethics for the Bio-Behavioral Sciences or PSY P595 First-Year Research Seminar
3. One additional course from 1-4 above.

Examination

As required by home department or program.

Statistics Requirement

As required by home department or program.

Thesis

Required.

Faculty

Director

Associate Professor Gregory E. Demas*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Jeffrey R. Alberts* (Psychological and Brain Sciences), Colin Allen* (History of Philosophy and Science), Randall D. Beer* (Cognitive Science), Peter Cherbas* (Biology), Robert de Ruyter van Steveninck* (Physics), Robert DeVoe* (Emeritus, Optometry), Preston E. Garraghty* (Neuroscience Program, Psychological and Brain Sciences), Julia R. Heiman* (Kinsey Institute, Psychological and Brain Sciences), Kevin D. Hunt* (Anthropology), Ellen D. Ketterson* (Biology), Curtis M. Lively* (Biology), Elisabeth Lloyd* (History and Philosophy of Science), Kenneth Mackie* (Psychological and Brain Sciences), Emilia P. Martins* (Biology), Craig E. Nelson* (Emeritus, Biology), Milos Novotny* (Chemistry), Rudolph Raff* (Biology), J. C. Randolph* (Public and Environmental Affairs), George V. Rebec* (Neuro-science Program, Psychological and Brain Sciences), Stephanie Sanders* (Gender Studies), Kathy D. Schick* (Anthropology), Dale R. Sengelaub* (Neuroscience Program, Psychological and Brain Sciences), Roderick A. Suthers* (Health Sciences, Neuroscience Program), William D. Timberlake* (Psychological and Brain Sciences), Peter M. Todd* (Cognitive Sciences), Virginia Vitzthum (Anthropology), Michael J. Wade* (Biology), Meredith J. West* (Psychological and Brain Sciences)

Associate Professors

Gregory E. Demas* (Biology), James L. Goodson* (Biology), Armin P. Moczek* (Biology), Whitney M. Schlegel (Human Biology, Biology), G. Troy Smith* (Biology), S. Holly Stocking* (Emeritus, Journalism), Gregory J. Velicer* (Biology), Suresh Viswanathan* (Optometry), Cara L. Wellman* (Psychological and Brain Sciences)

Assistant Professors

John M. Beggs* (Physics), Heather B. Bradshaw* (Psychological and Brain Sciences), Richmond Harbaugh* (Business), Laura Hurley* (Biology), Daniel B. Kearns* (Biology), Michael P. Muehlenbein* (Anthropology), Laura L. Scheiber* (Anthropology), Sima Setayeshgar* (Physics)

Senior Scientist

Andrew King (Psychological and Brain Sciences)

Associate Scientist

Marcy A. Kingsbury (Biology)

Academic Advisor

Associate Professor Gregory E. Demas, Jordan Hall 265, (812) 856-0158

Courses

ABEH–A 500 Introduction to Animal Behavior Research (1 cr.) Introduces students to research opportunities in animal behavior. Local researchers will present their recent research efforts, emphasizing the integrative aspects of their work and its application to functional and mechanistic explanations of behavior.

ABEH–A 501 Seminar in the Integrative Study of Animal Behavior (2–3 cr.) Investigation of functional behavior of animals (e.g., migration, parental behavior, mate choice) using an interdisciplinary approach that attempts to integrate the perspectives of developmental psychology, ecology and evolutionary biology, neural science, and the science of learning and memory. Topic will vary.

ABEH–A 502 Research and Professional Ethics in Bio-Behavioral Sciences (1 cr.) Readings and discussion dealing with general ethical issues in science, with a particular focus on animal behavior. Topics include treatment and protection of animals; the acquisition, analysis, and use of data; student-mentor and student-teacher relations; credit, authorship, and peer review.

Anthropology

College of Arts and Sciences

Departmental Contact: dwilkers@indiana.edu; (812) 855-1041

Departmental URL: www.indiana.edu/~anthro

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

1. Bachelor's degree from a recognized institution and evidence of academic potential to complete an advanced degree;
2. appropriate level of achievement on the Graduate Record Examination General Test (does not apply to international students);
3. three letters of recommendation;
4. a statement of goals in the field of anthropology; and

5. a completed application form.

Recommended undergraduate training in anthropology and related fields:

- for students interested primarily in the field of bioanthropology, courses in chemistry and the biological sciences;
- for students specializing in the field of archaeology, courses in history and earth sciences and the humanities;
- for students specializing in the subfield of social/cultural anthropology, courses in the social sciences and the humanities;
- for students specializing in the field of linguistic anthropology, courses in general linguistics and psycholinguistics.

Master of Arts Degree

Requirements

1. A minimum of 30 credit hours, with a minimum cumulative grade point average of 3.25 and no more than 6 credit hours of thesis credit. At least 20 credit hours must be in anthropology, including three courses (excluding thesis) that are numbered 500 or above;
2. at least one course that carries graduate credit in three of the four fields listed above;
3. at least one semester or two summer sessions of full-time study while in residence on the Bloomington campus; and **either**
4. a thesis **or**
5. a four-hour written examination.

Examination grading will be (a) pass with distinction, (b) pass (both of these include the award of the M.A. degree), or (c) failure. The examination may be taken twice, but two failures will result in automatic dismissal of the student.

Option (4) or (5) must be selected; no change will be allowed once the selection is made. No oral examination or defense of the thesis is required. The thesis must be read and approved by all members of the student's committee. A master's thesis may be based on library, laboratory, or field research. The department does not require, but does recommend, the completion of one foreign language, particularly if the student contemplates continuing for the Ph.D.

Doctor of Philosophy Degree

The Department of Anthropology offers all four fields of the discipline: archaeology, bioanthropology, linguistic anthropology, and social/cultural anthropology. Students elect one of these fields, but may take courses and/or pursue an inside minor in any of the other fields. Students may also select one of three concentrations, Archaeology and Social Context, Food Studies, and Paleoanthropology. Each of these concentrations is supplemental to the field. Each field involves its own breadth requirements within the Department of Anthropology and other that may require further class work. All four fields have the following requirements in common.

Foreign Language/Research Skills

One of three is required: (1) reading proficiency in two languages, one normally selected from French, German, Russian, Spanish, or Portuguese (consult advisor for additional languages); (2) proficiency in depth in one language, normally selected from French, German, Russian, Spanish, or Portuguese; or (3) reading proficiency in one of the languages cited in (1) plus proficiency in computer science or statistics.

Qualifying Examination

In order to be recommended to candidacy for the Ph.D. degree in anthropology, the student must pass a qualifying examination. This examination cannot be administered until the foreign language or research skills and other requirements have been fulfilled and until at least 60 credit hours have been earned. Students are strongly encouraged to complete course work and take the qualifying examination in three years.

The format of the exam shall be decided by the advisory committee in consultation with the student from among the following options:

1. a take-home exam, or
2. a proctored in-camera exam, or
3. an exam combining elements of (1) and (2).

Preparation, administration, and grading of the examination are the responsibility of the advisory committee, but other members of the department are free to participate without voting. A passing grade requires the affirmative vote of a majority of the anthropologists on the examining committee. Grading is as follows: (a) pass with distinction; (b) pass [both (a) and (b) include certification to doctoral candidacy and the M.A. degree if desired and not already awarded]; (c) low pass with terminal M.A. degree; (d) failure. The qualifying examination may be retaken once.

Research Proposal

At least two weeks before the qualifying examination, the student will circulate his or her Research Proposal to the Advisory Committee. The Research Proposal must include a statement of the research problem, a literature review related to that problem, the methodology to be employed, a tentative timetable of data collection and analysis, and (if a grant application has been or will be submitted) a discussion of funding prospects and the budget. All grant applications must be discussed with the student’s Academic Advisor. Students are normally examined on aspects of their research proposal during their qualifying examination, both the written and oral portions. Nomination to candidacy and appointment of the Research Committee cannot take place until the Research Proposal has been accepted by the Advisory Committee. All proposals that include the use of living human subjects must receive advance clearance by the IUB Institutional Review Board (Human Subjects) regardless of whether external funding is sought. This clearance is required for use of informants, participant observation, interviews, and questionnaires, as well as more invasive research such as measurement and testing.

Dissertation

Each candidate must prepare a doctoral dissertation as part of the requirements for the Ph.D. degree. This dissertation may be the result of fieldwork or laboratory or library research. The department expects field research as part of the student's doctoral training in anthropology, but the dissertation may be based upon field data, laboratory

data, museum collections, archives, or other documentary sources. The topic and general outline of the proposed dissertation must be approved by the candidate's research committee.

Final Defense

An oral examination of the dissertation—which cannot be waived—will be scheduled and administered by the candidate's research committee.

Teaching

The department considers teaching experience to be a critical part of graduate training. Therefore, every effort will be made to provide teaching opportunities for each graduate student.

Field Requirements

1. Archaeology
An inside minor (9 hours of coursework) must be selected from among the other fields in Anthropology (Bioanthropology, Linguistic Anthropology, or Social/Cultural Anthropology). The following required courses must be completed with a grade of B or better: Pro-seminar in Archaeology (P500), a course in the archaeology of the geographic area of specialization, an archaeological methods course, Archaeological Ethics (P509), a course in the history of Anthropology (usually H500 or H505), a course in the ethnography of the geographic area of specialization, and Human Osteology (B526).

2. Bioanthropology
An inside minor (9 hours of coursework) must be selected from among the other fields in Anthropology (Archaeology, Linguistic Anthropology, or Social/Cultural Anthropology). The following courses are required, and must be completed with a grade of B or better: one graduate course in Social/Cultural Anthropology or Linguistic Anthropology, and one graduate course in Archaeology. Bioanthropology students must also acquire expertise in Bioanthropology methods, and three chosen areas of specialization (e.g., evolutionary theory, molecular genetics). Expertise will be evaluated as part of the qualifying exam. Option 3 must be chosen for the Foreign Language and Research Skills requirement, with students gaining reading proficiency in at least one scholarly language, as well as in statistics and/or the use of computers for data management and analysis.

3. Linguistic Anthropology
The following courses are required, and must be completed with a grade of B or better: L500, H500, one graduate course in two of the other fields of Anthropology (Archaeology, Bioanthropology, or Social/Cultural Anthropology), three graduate courses chosen from the five basic areas of linguistics (phonetics, phonology, morphology, syntax, and historical and comparative linguistics), one course in linguistic field methods, two additional courses in Linguistics or related fields. In the qualifying exam, each student must demonstrate mastery of Linguistic Anthropology, one chosen area of specialization (e.g., language description, history, culture, discourse pragmatics, semiotics, or language conflict and shift), and one enthnographic area.

4. Social/Cultural Anthropology
The following courses are required, and must be completed with a grade of B or better: H500, E500, E606, one graduate course in two of the other fields of Anthropology (Archaeology, Bioanthropology, or Linguistic Anthropology). In the qualifying exam, each student must demonstrate mastery of Social/Cultural Anthropology, two chosen areas of specialization and one enthnographic area.

Ph.D. Minor in Anthropology

Students in other departments may minor in anthropology by completing at least 12 credit hours of course work in anthropology. No more than 6 credit hours will be accepted by transfer of graduate credit from another university. Each minor student is assigned a faculty advisor to help in the selection of a set of courses that best contributes to the research goals of the student.

Ph.D. Minor in Anthropology of Food

Students must take four courses (3 credits each) one of which must be the core course, ANTH E621 Food and Culture. The additional graduate courses in anthropology must be chosen from at least two different fields of the discipline (archaeology, cultural anthropology, biological anthropology, linguistic anthropology).

Special Minors in Anthropology: Health, Human Evolutionary Studies, and Human Dimensions of Global Environmental Change

See sections under Anthropology and Health.

Faculty

Chairperson

Professor Eduardo Brondizio*

Graduate Faculty
(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)
Note: “I” after a faculty member’s name indicates that the person teaches at Indiana University–Purdue University Indianapolis.

Director of Graduate Studies

Professor Kevin Hunt*, Student Building 130, (812) 855-3857, kdhunt@indiana.edu

Distinguished Professors

Richard Bauman* (Emeritus), Emilio F. Moran*

Rudy Professor

Emilio F. Moran*

Chancellors' Professors

Raymond J. DeMallie*, Robert Meier* (Emeritus), Anya Peterson Royce*

Professors

Joëlle Bahloul*, Eduardo Brondizio*, Geoffrey W. Conrad*, Della Collins Cook*, Paul Gebhard* (Emeritus), Paula D. Girshick*, Kevin D. Hunt*, Paul L. Jamison* (Emeritus), Christopher S. Peebles* (Emeritus), K. Anne Pyburn*, Kathy D. Schick*, Jeanne M. Sept*, M. Nazif Shahrani*, Beverly Stoeltje*, Nicholas P. Toth*, James Vaughan*

(Emeritus), Karen Donne Vitelli* (Emerita), Virginia J. Vitzthum, Andrea Wiley, Richard Wilk*

Associate Professors

Gracia Courtright Clark*, Sarah Lizbeth Friedman*, Frederika Ann Kaestle*, Philip Stanley LeSourd*, Patrick Munson* (Emeritus), Sarah Drue Phillips*, P. Thomas Schoenemann, Francis Trix, Catherine M. Tucker*

Assistant Professors

Susan Alt*, Sonya Atalay, Beth Anne Buggenhagen, Landon Shane Greene*, Stacie Marie King*, Michael P. Muehlenbein*, Laura Lee Scheiber*, Marvin Dale Sterling, Daniel Frank Suslak

Senior Lecturer

April Kay Sievert*

Adjunct Professors

Marcia Bezerra Almeida, Robert Botne* (Linguistics), David Burr* (I) (Anatomy and Cell Biology), James Golden Carrier, Jacques Desveaux, David Hakken* (Informatics), Charles Leslie, John McDowell* (Folklore and Ethnomusicology), Sheli Smith, Phil Stafford* (Center on Aging and Community), Susan Sutton* (I), Richard Ward* (I)

Adjunct Associate Professors

Jeannette Dickerson-Putnam* (I), Millicent Fleming-Moran (Applied Health Science), Jane Goodman* (Communication and Culture), Susan Brin Hyatt (I), Jason Baird Jackson* (Folklore and Ethnomusicology), Stephanie Kane* (Criminal Justice), John Langdon (Univ. of Indianapolis), Bradley Levinson* (Education/CLACS), G. William Monaghan* (Glenn Black Lab), Philip Parnell* (Criminal Justice), P. David Polly* (Geological Sciences), Susan Seizer* (Communication and Culture), Pravina Shukla* (Folklore and Ethnomusicology)

Adjunct Assistant Professors

Heather Akou (Apparel Merchandising and Interior Design), Zobeida Bonilla-Vega* (Applied Health Science), Serafin Coronel-Molina* (Education), Michael D. Foster* (Folklore and Ethnomusicology), Lessie Jo Frazier* (Gender Studies), Ilana M. Gershon (Communication and Culture), Mary Louis Gray* (Communication and Culture), Maria Grosz-Ngate* (African Studies), Gilles Havard, Hilary Kahn* (Center for the Study of Global Change), David McDonald* (Folklore and Ethnomusicology), Fernando Ona* (Applied Health Science), Stephen Selka* (African American and African Diaspora Studies), David Shorter (Folklore and Ethnomusicology), Andrea Dalledone Siqueira (Latin American and Caribbean Studies)

Other Adjunct Faculty

Timothy Baumann (Glenn Black Lab), Charles Beeker (Underwater Science), John W. Foster (Mathers Museum), Judith Kirk (Mathers Museum)

Courses

Bioanthropology

ANTH–B 301 Laboratory in Bioanthropology (3 cr.)

ANTH–B 370 Human Variation (3 cr.)

ANTH–B 405 Field Work in Bioanthropology (arr. cr.)

ANTH–B 464 Human Paleontology (3 cr.)

ANTH–B 466 The Primates (3 cr.)

ANTH–B 472 Bioanthropology of Aboriginal America (3 cr.)

ANTH–B 480 Human Growth and Development (3 cr.)

ANTH–B 500 Pro-Seminar in Bioanthropology (3 cr.) Human evolution from the standpoint of an interaction of biological, ecological, and sociocultural factors. Survey of bioanthropology from historical, systematic, and applied viewpoints; emphasis on changing content, concepts, methods, and organization of the science.

ANTH–B 512 Evolutionary Medicine (3 cr.) This course will incorporate principles from evolutionary theory into our understanding of various infectious and chronic diseases common to human populations both past and present. Although proximate mechanisms involving physiology and behavior will be discussed, the focus will be to determine why such mechanisms have evolved in the first place.

ANTH–B 521 Bioanthropology Research Methods (3 cr.) P: B200, B301. Designed for advanced students of bioanthropology and related biological sciences to familiarize them with the methods and techniques of collecting, preserving, and analyzing both morphological and somatological data.

ANTH–B 522 Laboratory Methods in Bioanthropology (2 cr.) P: Concurrent with B521. Laboratory dealing with methods and techniques of assessment and analysis of morphological and somatological data that forms the subject matter of B521.

ANTH–B 523 Anthropometry (3 cr.) P: B200, B301, or consent of instructor. Designed for advanced students in bioanthropology. Basic research techniques applicable to living populations. Research project on volunteer subjects required. Formation of hypotheses, data collection procedures, testing of hypotheses, and presentation of results in oral and written form will be stressed.

ANTH–B 524 Theory and Method in Human Paleontology (3 cr.) P: B200, B301, or consent of instructor. Emphasis on fossil hominid evolution and adaptation. Intensive study of human fossil skeletal anatomy. Reconstruction of hominid diets and positional behavior via skeletal analysis and functional morphology.

ANTH–B 525 Genetic Methods in Anthropology (3 cr.) P: B200, B301, or consent of instructor. Specialized training in laboratory procedures and interpretation of genetic markers found in human populations. Major systems covered are ABO, Rh, MNSs, Duffy, Kell, secretor status, and PTC testing. Emphasis on use of genetic markers in human evolutionary research.

ANTH–B 526 Human Osteology (3 cr.) P: B200, B301, or consent of instructor. Descriptive and functional morphology of the human skeleton with emphasis on the

identification of fragmentary materials. Determination of age, sex, and stature; craniology; and research methods in skeletal biology. Guided research project in the identification of skeletal material required.

ANTH–B 527 Human Evolutionary Biology Laboratory (3 cr.) This course provides students with experience conducting actual research in human evolutionary biology. Students work together in small groups to collect data on living humans, perform laboratory/statistical analyses and prepare/present manuscripts. Students will gain experience with scientific methodology, human subjects committees, survey design, sample collection, and biomarker assays.

ANTH–B 528 Dental Anthropology (3 cr.) P: B200, B301, or consent of the instructor. Descriptive and functional morphology of primate dentitions, stressing nomenclature of crown features. Human enamel microstructure, development, wear, occlusion, pathology, odontometrics, and discrete variation as applied to research problems in bioanthropology. A guided research project is required.

ANTH–B 540 Hormones and Human Behavior (3 cr.) This course will review the roles of hormones in the evolution and expression of human and nonhuman animal behaviors. Emphasis will be placed on behaviors associated with aggression, stress, mating, and parenting. This course is particularly relevant for students interested in evolutionary psychology and human health.

ANTH–B 545 Nutritional Anthropology (3 cr.) A biocultural approach to diet and nutrition. Basic concepts in nutrition. Methods to assess dietary intake and nutritional status. Diet in human evolution, human biological variation, and the adaptive significance of food processing. Contemporary critiques of nutrition and food policies; globalization of diet; and anthropological perspectives on under- and over-nutrition.

ANTH–B 548 Human Demography and Life History (3 cr.) An exploration of the relationships between the human lifecycle and population dynamics. Classic and contemporary theories of population dynamics will be explored and considered in relation to evolutionary theory, highlighting life history theory. Demographic methods will be presented. Examples of anthropological studies of demography and life history will be utilized.

ANTH–B 550 Issues in Human Origins: Creation and Evolution (3 cr.) Review of the creation/evolution controversy in a seminar setting. Fundamentals of organic evolution covered, especially pertaining to the origins of our species. Additionally, the major arguments as set forth by "scientific creationists" are presented, along with an appraisal of the "balanced treatment" notion that has been proposed for inclusion in public school curricula.

ANTH–B 568 The Evolution of Primate Social Behavior (3 cr.) Major patterns of social organization in the order of primates, with closer examination of several important primate species. Darwinian theories of behavioral evolution will be examined. Particular attention will be paid to the influence of food-getting and diet on social behavior.

ANTH–B 570 Human Adaptation: Biological Approaches (3 cr.) Understanding the concept of adaptation as it is utilized within bioanthropology, anthropology, and other disciplines. Focus on individual and population responses to heat, cold, solar radiation, high altitude, nutritional and disease stress. Participation in discussion and presentation of oral and written reports emphasized throughout the seminar.

ANTH–B 600 Seminar in Bioanthropology (3 cr.) Subject will vary; students may thus receive credit more than once.

ANTH–B 601 Primate Anatomy (3 cr.) P: B200, B301; P or concurrent: B466. Comparative anatomy of the nonhuman primates with emphasis on the analysis of bone and muscle relationships. Application of comparative techniques to current research in bioanthropology. Dissection of several primate species required.

ANTH–B 602 Paleopathology (3 cr.) P: B200, B301. Disease in prehistoric skeletal material and in written and visual representations. Diagnosis and epidemiological characterization of diseases of bone. A guided research project on a topic in paleopathology is required. Seminar presentation of two literature reviews and a research project are required.

General Anthropology

ANTH–A 303 Evolution and Prehistory (3 cr.)

ANTH–A 403 Introduction to Museum Studies (3 cr.)

ANTH–A 405 Museum Methods (3 cr.)

ANTH–A 406 Field Work in Anthropology (1–8 cr.) 8 cr. max.

ANTH–A 408 Museum Practicum (1–4 cr.) 8 cr. max.

ANTH–A 495 Individual Readings in Anthropology (1–4 cr.)

ANTH–A 505 Fields of Anthropology: A Graduate Survey (3 cr.) Cultural anthropology, linguistics, archaeology, physical anthropology. For graduate students of other departments and beginning graduate students in anthropology.

ANTH–A 506 Anthropological Statistics (3 cr.) Statistics in all fields of anthropology. Scales, frequency distributions, contingency, correlation, probability, sampling, significance tests, elementary multivariate analysis.

ANTH–A 521 Internship in Teaching Anthropology (3 cr.) Systematic and supervised internship required of all first-year associate instructors. Course includes formal class presentations by the departmental associate instructor (AI) trainer, formal development of teaching materials, prescribed observations of "master teachers," and supervisory visits by the AI trainer.

ANTH–A 525 Community Based Research I (3 cr.) Community based research involves a partnership approach in which responsibility for planning, conducting, and evaluating research is shared with a community. This course provides grounding in community based research methods, examining how they transform social science research. We will explore issues of ethics, power relations, and field work practices.

ANTH–A 600 Seminar in Anthropology (2–4 cr.) May be taken in successive semesters for credit.

ANTH–A 800 Research (arr. cr.) (1) Archaeology, (2) ethnology, (3) linguistics, and/or (4) physical anthropology.

ANTH–E 303 Introduction to Social and Cultural Anthropology (3 cr.)

Social and Cultural Anthropology

ANTH–E 305 Introduction to Ethnomusicology (3 cr.)

ANTH–E 310 Introduction to the Cultures of Africa (3 cr.)

ANTH–E 311 The Ethnography of Eastern Africa (3 cr.)

ANTH–E 320 Indians of North America (3 cr.)

ANTH–E 321 Peoples of Mexico (3 cr.)

ANTH–E 322 Peoples of Brazil (3 cr.)

ANTH–E 325 North American Indian Music (3 cr.)

ANTH–E 329 Indians in the United States in the Twentieth Century (3 cr.)

ANTH–E 330 Indians of South America (3 cr.)

ANTH–E 332 Jewish Women: Anthropological Perspectives (3 cr.)

ANTH–E 334 Jews in Moslem Society (3 cr.)

ANTH–E 340 Indians of Mexico and Central America (3 cr.)

ANTH–E 370 Peasant Society and Culture (3 cr.)

ANTH–E 371 Modern Jewish Culture and Society (3 cr.)

ANTH–E 372 Racism, Anthropology of Prejudice (3 cr.)

ANTH–E 375 Mental Illness in Cross-Cultural Perspectives (3 cr.)

ANTH–E 380 Urban Anthropology (3 cr.)

ANTH–E 404 Field Methods in Ethnography (3 cr.)

ANTH–E 405 Principles of Social Organization (3 cr.)

ANTH–E 406 Anthropological and Documentary Film (3 cr.)

ANTH–E 407 Visual Anthropology: Filmmaking (3 cr.) P: Junior standing or permission of instructor. Experimental filmmaking concerning social behavior, institutions, and customs.

ANTH–E 420 Economic Anthropology (3 cr.)

ANTH–E 425 Ethnozoology: Studies in American Indian Subsistence (3 cr.)

ANTH–E 427 Human Adaptation: Cultural Approaches (3 cr.)

ANTH–E 430 Kinship Organization (3 cr.)

ANTH–E 440 Political Anthropology (3 cr.)

ANTH–E 450 Folk Religions (3 cr.)

ANTH–E 451 Myth and Legend: Cultural Meanings and Interpretations (3 cr.)

ANTH–E 453 Revitalization Movements (3 cr.)

ANTH–E 455 Anthropology of Religion (3 cr.)

ANTH–E 457 Ethnic Identity (3 cr.)

ANTH–E 460 The Arts in Anthropology (3 cr.)

ANTH–E 462 Anthropological Folklore (3 cr.)

ANTH–E 463 Anthropology of Dance (3 cr.)

ANTH–E 470 Psychological Anthropology (3 cr.)

ANTH–E 480 Theory of Culture Change (3 cr.)

ANTH–E 510 Problems in African Ethnography and Ethnology (3 cr.)

ANTH–E 511 Ethnography of the Congo (2 cr.)

ANTH–E 465 Medical Anthropology (3 cr.) A cross-cultural examination of a biocultural systems model of human adaptation in health and disease, including: the interaction of biology, ecology, and culture in health; ethnomedical systems in the cross-cultural conception, presentation, diagnosis, and treatment of disease; and sociocultural change and health.

ANTH–E 500 Proseminar in Cultural and Social Anthropology (3 cr.) Broad survey covering economics, ecology, kinship, life cycle, education, social stratification, political organization, religion, values, culture change, evolution, methodology, etc.

ANTH–E 505 Social Organization and Process (3 cr.) Anthropological analysis of sociocultural process from symbolic interactionist perspective. Topics include critical comparison of relevant theories, cross-cultural applications, and methodology of field research.

ANTH–E 520 Problems in Economic Anthropology (3 cr.) P: Consent of instructor. Seminar on problems related to the study of technologies and economic systems of non-Western peoples.

ANTH–E 523 Life Histories (3 cr.) Life histories give ethnographies accessibility, emotional impact, deep contextualization, and a deceptively transparent opening for authentic voices. This course explores the complex issues of power and knowledge underlying this method, including interviewing strategies, consent, confidentiality, editing and publishing choices, and considers its position within broader research agendas. We discuss classic examples, recent narrative collections and contemporary experimental texts.

ANTH–E 525 Comparative Ethnology of North America (3 cr.) P: A505 or E500; E320; A506; or consent of instructor. Seminar on comparative problems of North American Indian cultures.

ANTH–E 527 Environmental Anthropology (3 cr.) Graduate course on theory and method in the study of human-environment interactions. Emphasis on contemporary debates and approaches and on research design in environmental research.

ANTH–E 593 World Fiction and Cultural Anthropology (3 cr.) This course links literature and anthropology as means of understanding culture. Ethnographic writing and world fiction—novels, short stories, poems, myths, folktales—are analyzed for what they reveal about the social, cultural and political lives of peoples around the

world. Colonialism, war, socialism, and immigration are among the issues discussed.

ANTH–E 600 Seminar in Cultural and Social Anthropology (3 cr.) Subject will vary; students can receive credit more than once.

ANTH–E 601 Basics of Human Sexuality (3 cr.) Topics are: (1) introductory lectures on mammalian behavior, anatomy, physiology, reproduction, and sexual development; (2) solitary sexual behavior: orgasm in sleep and masturbation; (3) heterosexual behavior; (4) homosexual behavior; (5) deviance and paraphilias; and (6) social control of sexuality.

ANTH–E 602 Levi-Strauss: Structuralism in Anthropology (3 cr.) Analysis of structuralist texts and theory. Reading and explicating the writings of Levi-Strauss in order to learn how to interpret concepts and methods of the author and how to use them for further research.

ANTH–E 603 Modernities: Time, Space, Identity of the Historical Present (3 cr.) This course examines the history of social and cultural theory as organized around the concept of modernity. We examine what, where, and who is implied by the term, where it originates, and how it continues to be contested by contemporary scholars.

ANTH–E 606 Research Methods in Cultural Anthropology (3 cr.) P: Must be a graduate student in anthropology or obtain consent of instructor. Organization, design, and execution of anthropological research will be examined in its many contexts; specific research techniques will be demonstrated through laboratory exercises and conduct of student projects.

ANTH–E 608 Thesis Proposal Preparation (3 cr.) Social science and humanities students will learn how to frame research questions in this course. While graduate students will formulate proposals with their doctoral committees, this course will provide the necessary background reading and peer review to prepare a serious proposal that will be competitive in national grant competitions.

ANTH–E 610 Seminar in Households, Family, and Gender (3 cr.) Asks how basic social units like family and households are socially constructed and maintained. Current literature on social exchange, bargaining, decision-making, and gender. Pressing current issues such as child welfare, equity in economic development, abusive relationships, and consumer choice.

ANTH–E 612 Anthropology of Russia and East Europe (3 cr.) Explores the contradictory effects of socialism's "fall" through a study of new ethnographies of postsocialist societies. We will connect our inquiries to broad intellectual questions in anthropology and related disciplines, including globalization, social suffering, commodification and cultural identity, ethnicity and nation building, armed conflict, and gender inequalities.

ANTH–E 614 Post-Socialist Gender Formations (3 cr.) An anthropological approach to understanding socialist and post-socialist gender formations in Eastern Europe and the former Soviet Union. Particular attention will be paid to changing discourses of femininity, feminism, masculinity, and sexuality in post-socialist countries.

ANTH–E 616 The Anthropology of Tourism (3 cr.) This course will explore the phenomenon of tourism from an anthropological perspective. It will look at tourism as linked to consumer culture, transnational movements of people and goods, post-colonial settings, global capitalism, and the politics of ethnic and national identities.

ANTH–E 617 African Women (3 cr.) Examines the remarkably active roles that African women play in their communities. Follows the themes of autonomy and control of resources, considering both economic resources (such as land, labor, income, and cattle) and social resources (such as education, religion, and political power).

ANTH–E 618 Global Consumer Culture (3 cr.) Examines processes of globalization and economic and cultural integration, including the origin and spread of mass-consumer society. Topics include the theories of consumption, mass media and advertising, and the relationship between modernity and consumerism. Examples from Africa, Latin America, Asia, and the United States are included.

ANTH–E 619 American Indian Religion (3 cr.) Introduces religions of the peoples indigenous to North America. Concerns include traditional and contemporary native rituals, mythology, folklore, and symbolism occurring throughout these many cultures, including topics such as art, architecture, cosmology, sustenance, modes, trade, history, gender, and taboos.

ANTH–E 620 Seminar in Cultural Ecology (3 cr.) Rotating topics in cultural ecology: explores cultural adaptations to specific environments. Emphasis is placed on individual research by students, discussion of relevant theoretical and methodological issues, and critical evaluation of research.

ANTH–E 621 Food and Culture (3 cr.) Discusses the political economy of food production, trade, and consumption on a global basis. Gives a cross-cultural and historical perspective on the development of cooking and cuisine in relationship to individual, national, and ethnic identity. Relates cuisine to modernity, migration, and forms of cultural mixing and Creolization.

ANTH–E 622 Empirical Theory and Methodology: International Forest Resources and Institutions (3 cr.) This course trains participants in the International Forestry Resources and Institutions (IFRI) research programs, which explores how communities influence local forest conditions. Theories of institutional analysis and human dimensions of environmental change underlie the course. Methods include participatory techniques, interviews, forest mensuration. Participants conduct fieldwork in an Indiana community.

ANTH–E 624 Native American Art (3 cr.) Addresses the principles of Native art and its materials, styles, functions, methods, meanings, and the contexts in which Native art is used. In addition to addressing the principles, cultural, anthropological, and indigenoustheories will be explored. Cultural background information will be interwoven in the lectures and discussions.

ANTH–E 626 Coffee Culture, Production, and Markets (3 cr.) This course considers diverse expressions of “coffee culture” in production, markets, and consumption patterns. It explores the history of coffee production and

trade, coffee's impact on international relations, and its implications for environmental change, social justice, and economic development. We will also study local meanings of coffee and its consumption.

ANTH–E 628 Contemporary Latin American Social Movements (3 cr.) In this course we compare and contrast contemporary activist and grassroots movements throughout the Latin American region. We focus on movements both within the region and within the Latin American diaspora in the US, organized around the rubrics of ethnicity, gender, resources, and environment.

ANTH–E 641 Law as Cultural Practice in the United States (3 cr.) Explores modern life in the U.S. through two lenses: contemporary ethnography and recent Supreme Court opinions. Specific topics vary. Examples include the nature of moral traditions; civil rights; family; privacy and choice; the significance of race.

ANTH–E 644 People and Protected Areas: Theories and Realities of Conservation (3 cr.) Explores major theories and approaches to conservation, from "fortress conservation" to community-based and participatory strategies. It considers the implication of protected areas for local human populations and cultural diversity. It evaluates outcomes and unintended consequences of protected areas, and controversies over the "best" way to protect natural resources.

ANTH–E 645 Seminar in Medical Anthropology (3 cr.) Focuses on theoretical approaches to understanding the body and notions of health, illness, and disease across cultures. Concentrates on interpretive and critical (political economy) approaches to issues of health and includes critical study of Western biomedicine.

ANTH–E 648 Power, Subjectivity, and the State (3 cr.) Explores relationships among culture, power, subjectivity, and the state through close readings of theoretical and ethnographic texts. Examines how different theoretical appreaches have defined and used these contested terms. Developing insights from social theorists, compares ethnographic efforts to integrate theory with anthropological data.

ANTH–E 649 Culture, Power, History (3 cr.) Culture, power, and history have been three of the most important concerns and concepts in social and cultural anthropology. This course examines how we have understood and used them and how they have defined and continue to define the field.

ANTH–E 650 African Systems of Thought (1–3 cr.) Examines approaches to the analysis of systems of thought and their correlates in social action in African societies. Focuses on structural differences among the various systems of ideas used for interpreting experience in different African societies. Attention paid to alterations made in cosmological systems in situations of social change.

ANTH–E 656 The Anthropology of Race (3 cr.) This course explores race in cultural anthropological perspective. It investigates the history of this idea within the discipline as well as its dissemination in international society. The course explores the play between challenges to race as an intellectual paradigm and the resilient status of race-thinking in society at large.

ANTH–E 660 Arts in Anthropology Seminar (3 cr.) Anthropology's concern with the arts; cross-cultural study and comparison; the relationships of the arts to other aspects of society and culture; problems of the cross-cultural validity of aesthetics and the interrelationships of the arts. Subject will vary; students can receive credit more than once.

ANTH–E 661 Seminar in Ethnomusicology I (3 cr.) Techniques of transcription and analysis of the music of nonliterate peoples.

ANTH–E 662 Seminar in Ethnomusicology II (3 cr.) Music as it functions in human society. Role of the musician, concepts underlying production of musical sound, symbolic and other functions of music.

ANTH–E 663 Exhibiting Cultures: Museums, Exhibitions, and World's Fairs (3 cr.) P: E310 or consent of instructor. Explores the ideas, values and symbols that pervade and shape the practice of exhibiting other cultures. Examines the ways in which museums and other sites of exhibition accord objects particular significances, the politics of exhibitions and display strategies, and the interpretive differences between art, anthropology and other types of museums and institutions which exhibit other cultures.

ANTH–E 664 Body, Power, and Performance (3 cr.) This course explores performance in relation to social power. Its focus is on the body, and explores the extent to which several interdisciplinary readings on performance theory—largely emerging as they have from Western intellectual traditions—speak to embodied/performative negotiations of social power outside "the West."

ANTH–E 670 Seminar in Culture and Personality (3 cr.) Culture seminar for the investigation of advanced problems in culture and personality. Focus will be primarily on developments since 1960, particularly in such areas as the situational determinants of personality, cognitive growth, and adolescent studies.

ANTH–E 673 Feminist Studies and Ethnographic Practice (3 cr.) Focuses on the impact of feminist theory on ethnographic practice in the fields of anthropology and criminology. We will read key works from the 1980s to the present that exemplify various feminist approaches to the study of culture and society.

ANTH–E 674 The Anthropology of Human Rights (3 cr.) This course investigates anthropology's theoretical and practical engagements with global social justice. It examines a number of texts central to the development of the notion of human rights, and explores several case studies oriented around a range of historical and contemporary human rights issues.

ANTH–E 675 Law and Culture (3 cr.) Introduction to classic anthropological writing on cultural concepts of law, conflict, and social ordering concentrating on ethnographic approaches since the 1960s. Focus is cross-cultural, following the emphasis of the works themselves on Africa, native North America, and the contemporary United States. Discussions emphasize the historical context of individual works and critical readings from the vantage points offered by contemporary anthropological theory.

ANTH–E 677 Performing Nationalism (3 cr.) Throughout the world, and including the United States, nationalism

movements draw upon symbolic forms to create unity. These movements may express resistance to domination, or they can be the forces of domination itself. The course examines these processes cross-culturally, focusing on symbolic forms (ritual, song, film, novels, discourse).

ANTH–E 678 Ritual, Festival, and Public Culture (3 cr.) Examines the ritual genres with anthropological theories of ritual and power. Utilizes performance theory and analysis of production, linking ritual to public culture; explores it as a response to contradiction in social political life that may express resistance pr domination. Considers preindustrial and modern societies and sacred and secular events.

ANTH–E 680 Seminar in Culture Change (3 cr.) P: Three courses in cultural anthropology, including the courses listed under both ethnology and ethnography, and consent of instructor. Research by students under the instructor's supervision, group discussions, and occasional lectures on various problems concerning culture change.

ANTH–E 681 Seminar in Urban Anthropology (3 cr.) P: E580. Practical work required. Seminar in cross-cultural urban social organization, emphasizing recruitment manifestation of urbanism in various cultural contexts and techniques of investigation.

ANTH–E 682 Memory and Culture (3 cr.) Students will interrogate the concept of "collective memory," based on Halbwachs' major contribution in the domain. This social scientific analysis of remembrance as culturally determined will review diverse contexts in which it unfolds (i.e., art, fiction, ritual, architecture, bodily practice, national identity, and politics).

ANTH–E 687 The Ethnography of Europe (3 cr.) Explores "Europe" as an idea, an identity, and a historical consciousness. Students discuss how European ethnography has acquired a valued status in social anthropology, how it has been instituted as a "cultural area," and how the discipline constantly revises social, cultural, political, and nationalist boundaries.

ANTH–E 690 Development and Anthropology (3 cr.) P: E420 or consent of instructor. The theory of development; the way anthropology has been employed in development schemes in Melanesia, Southeast Asia, India, Africa, and elsewhere; the practical problem of relating to development bodies such as AID and Third World governments; the ethical problem of such relationships.

ANTH–E 692 The United States (3 cr.) Reviews current ethnographic studies of the United States, emphasizing themes of cultural diversity, relationships between individuals and their communities, and the roles of public institutions at local, state, and federal levels.

ANTH–G 731 Seminar on contemporary Africa (arr. cr.)

History of Anthropology

ANTH–E 635 French Social Thought: Anthropological Perspectives (3 cr.) Students will read and explicate the writings of six prominent scholars in twentieth-century French social thought (i.e., Durkheim, Mauss, Levi-Strauss, Barthes, Foucault, and Bourdieu). They will discuss these thinkers' contributions to contemporary anthropological theory, and will reflect on the usage of these works in their respective doctoral projects.

ANTH–H 500 History of Anthropological Thought in the Nineteenth and Twentieth Centuries (3 cr.) Development of nineteenth-century and contemporary anthropological thought, with special reference to methods and theory of scientific anthropology.

ANTH–H 501 Contemporary Problems and Issues in Ethnological Theory (3–6 cr.) P: Introductory work in anthropology. Special attention to problems arising from relation of cultural anthropology to other social sciences, such as psychology and history.

ANTH–H 505 History of Social Anthropology (3 cr.) R: Course in social organization. Seminar on development of social anthropology, with special attention to various "schools" such as functionalism and to major figures from Edward Tylor to Alfred Radcliffe-Brown.

ANTH–H 506 Modern Development in Social Anthropology (3 cr.) Seminar on development of social anthropology since World War II, with special attention to contributions of influential Cambridge, Manchester, and London "schools."

Anthropological Linguistics

ANTH–L 500 Proseminar in Language and Culture (3 cr.) Relationships of language and culture; survey of ethnolinguistics, sociolinguistics, psycholinguistics, Weltanschauung theory, diglossia, bilingualism, and single language society; relevance of linguistic analysis to cultural and social anthropology.

ANTH–L 501-502 Anthropological Linguistics I-II (3-3 cr.) An introduction to grammatical discovery procedure, including phonetic, phonemic, morphemic, and syntactic analysis, designed to introduce the student to techniques for use with an unknown language in the field.

ANTH–L 507 Language and Prehistory (3 cr.) An introduction to the areas of linguistic research that are the most relevant to the work of archaeologists and students of prehistory. Topics include mechanisms of linguistic change, the comparative method, genetic and area relationships among languages, and applications of linguistic reconstruction to the study of ancient cultures and populations.

ANTH–L 510 Elementary Lakota (Sioux) Language I (3 cr.) Introduction to Lakota (Sioux), an American Indian language spoken on the northern plains of the United States. Focuses on developing elementary reading and writing skills as well as oral fluency in the Lakota language within the context of Lakota culture.

ANTH–L 511 Elementary Lakota (Sioux) Language II (3 cr.) Introduction to Lakota (Sioux), an American Indian language spoken on the northern plains of the United States. Focuses on developing elementary reading and writing skills as well as oral fluency in the Lakota language within the context of Lakota culture.

ANTH–L 512 Intermediate Lakota (Sioux) Language I (3 cr.) Study of more complex Lakota grammatical structures, with emphasis on development of active reading, writing, and speaking skills.

ANTH–L 513 Intermediate Lakota (Sioux) Language II (3 cr.) Study of more complex Lakota grammatical

structures, with emphasis on development of active reading, writing, and speaking skills.

ANTH–L 518 Navajo Language and Culture (3 cr.) Introduction to the Navajo language and an exploration of it as an integral dimension of Navajo culture. Topics include Navajo history, kinship, ritual life, beliefs, and literature, and will be grounded in the appropriate dimensions of Navajo grammar. Provides a case study to review the major issues in the field of language and culture.

ANTH–L 520 American Indian Languages (3 cr.) Introductory survey of the native languages of the Americas. Topics include history of the study of American Indian languages, genetic and typological classifications, structures of selected languages, the comparative (historical) study of selected language families, and the interplay between language and culture. Emphasizes diversity of New World languages.

ANTH–L 580 Semiotics and Human Ethnology (2 cr.) Study of the relationship between the general theory of signs and the biological study of behavior under three headings: elaboration of theoretical models, study of animal communication systems as a natural and behavioral science, and their exploitation for the benefit of humankind.

ANTH–L 600 Topical Seminar in the Ethnography of Communication (3 cr.) Current issues in linguistic anthropology designed to acquaint the student with readings and points of view not covered in the introductory courses. Topics such as: (1) languages of the world, (2) variation in language, (3) problems in linguistic structure, and (4) culture and communication. May be repeated for credit with change of topic.

ANTH–L 605-606 Field Methods in Anthropological Linguistics I-II (3-3 cr.)

ANTH–L 840 Ethnolinguistic Seminar (1–2 cr.) P: Consent of instructor. Structural statements and arrangements of data in anthropology (including folklore and musicology) and linguistics.

Archaeology

ANTH–P 301 Archaeological Methods and Analyses (3 cr.)

ANTH–P 310 Prehistory of Europe and Asia (3 cr.)

ANTH–P 314 Early Prehistory of Africa (3 cr.)

ANTH–P 315 Late Prehistory of Africa (3 cr.)

ANTH–P 360 North American Archaeology (3 cr.)

ANTH–P 361 Prehistory of Midwestern United States (3 cr.)

ANTH–P 365 Prehistory of Western North America (3 cr.)

ANTH–P 370 Ancient Civilizations of the Andes (3 cr.)

ANTH–P 371 Prehistory of Lowland South America (3 cr.)

ANTH–P 380 Prehistoric Diet and Nutrition (3 cr.)

ANTH–P 405 Field Work in Archaeology (arr. cr.)

ANTH–P 425 Zooarchaeology I: Faunal Osteology (5 cr.)

ANTH–P 426 Zooarchaeology II: Problems in Zooarchaeology (5 cr.)

ANTH–P 500 Proseminar in Archaeology (3 cr.) Exposes students to the historical and theoretical foundations of contemporary anthropological archaeology. The class is required for all graduate students in archaeology, and is open to other students in anthropology and in other departments who are interested in the modern practice of archaeology.

ANTH–P 505 History of Theory in Archaeology (3 cr.) Seminar on the development of theoretical constructs and "schools" in prehistoric archaeology. Focus on thought of major figures such as V. G. Childe, J. G. D. Clark, D. Clarke, L. R. Binford, J. C. Gardin, A. C. Renfrew, and W. W. Taylor.

ANTH–P 506 Laboratory Methods in Archaeology (1–6 cr.) P: P405 or consent of instructor. Specialized training in laboratory procedures and analysis of archaeological materials. Major categories of material culture to be studied include lithics, ceramics, faunal and floral remains. Emphasis is on processing, sorting, identifying, and analyzing material recovered from the previous Field School in Archaeology (P405).

ANTH–P 509 Archaeological Ethics (3 cr.) Explores the professional responsibilities of archaeologists by examining timely issues, such as the differences and, sometimes, conflicts between international law and professional ethics, and between archaeologists and others (e.g., Native Americans, antiquities collectors) who affect and are affected by archaeological work. Some background in archaeology is helpful.

ANTH–P 541 Archaeology of the Middle East (3 cr.) This course is about the prehistoric cultures of the Middle East. We will examine evidence for daily life, the rise of complex society, early writing, and agriculture, while exploring the impact that archaeology in this region has on our contemporary world.

ANTH–P 545 Indigenous Archaeology (3 cr.) How do Indigenous people do archeology? How do they protect their sacred sites and places and build and manage knowledge about their pasts? This course takes a global approach to examining such questions. Students examine Indigenous world views and ways that archaeologists and Indigenous communities work together in archeology.

ANTH–P 575 Food in the Ancient World (3 cr.) We will look at the theoretical and methodological tools that archaeologists use to study food and foodways in ancient societies from a global anthropological perspective. We explore how studying food and ancient foodways gives us a window into economic, symbolic, historic, and political realities of past peoples.

ANTH–P 600 Seminar in Prehistoric Archaeology (3 cr.) Subject will vary; students may thus receive credit more than once.

ANTH–P 601 Research Methods in Archaeology (3 cr.) This course introduces the student to the practice of archaeology at a professional level. Although of variable

topics, all courses will involve hands-on experience with analysis and techniques of data collection.

ANTH–P 604 Seminar in Archaeology and Social Context (3 cr.) Required course for students in the archaeology and social context graduate program. The topic is variable, but will always emphasize the social, political, and economic repercussions of archaeological work.

ANTH–P 663 North American Prehistory through Fiction (3 cr.) Students consider fictionalized accounts of life in prehistoric North America, written by anthropologists, Native Americans, and novelists, as a means to think critically and creatively about the past. They explore the role and place of narrative and imagination in construction of the past and consider how authors utilize available data.

ANTH–P 666 Women in Civilization (3 cr.) Course looks at empirical and theoretical issues related to the reconstruction of gender identity, household organization, and the division of labor in the development of early states.

Apparel Merchandising and Interior Design

College of Arts and Sciences

Departmental E-mail: tshockle@indiana.edu

Departmental URL: www.indiana.edu/~amid

Curriculum

Degree Offered

Master of Science

Special Departmental Requirements

(See also general University Graduate School requirements).

Note: The department currently is not accepting applications in Apparel Merchandising or Interior Design.

Admission Requirements

All Students

Minimum of 600 on the verbal section and on at least one other section of the Graduate Record Examination General Test. Minimum undergraduate GPA equivalent to 3.0 on 4.0 scale.

Foreign Students

Minimum of 573 (paper) or 230 (electronic) on the Test of English as a Foreign Language.

Apparel Merchandising

Eighteen semester hours of undergraduate credit in apparel merchandising and/or a related field (e.g., economics), 9 of which must be at the junior or senior level.

Interior Design

Baccalaureate from a FIDER- (interior design) or NAAB- (architecture) accredited program and a portfolio of original work in interior design and/or architecture.

Course Requirements

Apparel Merchandising

A minimum of 34 credit hours, to include H550, a 3-credit seminar or readings course in area of concentration; H598 Research, H599 Thesis, or H597 Project (if project is selected, a total of 37 credit hours is required); and a graduate course in statistics.

Interior Design

A minimum of 34 credit hours, to include H550, H568, H573, H598 Research, H599 Thesis, a graduate course in statistics, and 12 credits in one or two related area(s). H597 Project is not available to graduate students in interior design.

Fields of Study

Individualized programs are available in two different areas: apparel and textiles; and interior design.

Final Examination

Oral defense of the thesis; for those not electing thesis (apparel merchandising candidates only), a comprehensive written examination.

Faculty

Interim Chairperson

Kathleen Rowold

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professor

Reed Benhamou (Emeritus), Kathleen Rowold

Associate Professor

C. Thomas Mitchell

Assistant Professors

Heather Marie Akou, Kennon Smith

Apparel Merchandising

Professor Kathleen Rowold

Interior Design

Associate Professor C. Thomas Mitchell

Courses

AMID–H 413 Apparel Merchandise Planning and Analysis (3 cr.) Essentials of merchandise buying and planning: consumer trends, market resources and trade practices, seasonal plans, assortment planning and analytic tools for inventory evaluations.

AMID–H 415 Readings in Textiles and Apparel (arr. cr.)

AMID–H 504 Textiles and Apparel in the Global Economy (3 cr.) P: Graduate standing. Research and analysis of economic issues that affect the development of textiles and apparel at the global level. Critical analysis of labor and development theories and international relations

will be included. Global sourcing, production, and import/export strategies will be addressed.

AMID–H 506 Fashion Analysis and Theory (3 cr.) P: Graduate standing. In-depth study and critical analysis of classic and modern fashion theories, with emphasis placed on postmodern fashion theory development. Students are expected to make significant progress toward new theoretical development of fashion theory.

AMID–H 510 Apparel Entrepreneurship (3 cr.) P: Graduate standing, AMID H413 or equivalent. R: Accounting and research methods. Research and development of individualized plans for decision making, problem solving, and opening a small apparel-related retail business. Developing, implementing, and analyzing entrepreneurial strategies; financial goals; methods of accounting and control; and merchandising, operation, and management skills.

AMID–H 511 Behavioral Aspects of Dress (3 cr.) P: Graduate standing, Theories from social psychology will be employed in research examining clothing and appearance and their effects on the self and others.

AMID–H 512 Recent Developments in Textiles (3 cr.) New developments in textiles; analysis of quality control and production standards; evaluation of current problems.

AMID–H 519 Special Problems: Textiles and Apparel (1–3 cr.) P: Consent of department. Independent work in analysis and interpretation of various aspects of textiles and apparel field. Topic may vary.

AMID–H 550 Research Methods in Apparel Merchandising and Interior Design (3 cr.) Evaluating and understanding of research; identifying needed research; planning a research problem.

AMID–H 567 Trends in Interior Design (3 cr.) P: H475 or H476 or equivalent, consent of department. Changing patterns in interior design; contemporary furnishings.

AMID–H 568 Contemporary Issues in Design (3 cr.) P: Graduate standing. Contrast between traditional and emerging views of design will be explored in terms of the design philosophy that arose in response to industrialism/modernism and the subsequent reactions to and against it, such as postmodernism, deconstruction, and New Design.

AMID–H 573 Special Problems: Interior Design (1–3 cr.) P: Consent of department. Independent work in advanced interior design problems.

AMID–H 575 The Productive Work Place (3 cr.) P: Graduate standing. Design of nonresidential interior environments through the application of research into the effect of physical factors on productivity in the workplace.

AMID–H 576 Design for Diverse Communities (3 cr.) P: Graduate standing. Design of interior spaces that enhance community-specific needs and lifestyles.

AMID–H 580 Seminar in Consumer Issues (3 cr.) P: Consent of department. Varying topics dealing with consumer interests and family economics.

AMID–H 590 Workshop in Apparel Merchandising and Interior Design (1–3 cr.) P: Consent of department. Workshop in current issues, trends, programs. Emphasis varies and is announced in workshop title.

AMID–H 597 Projects (1–4 cr.) P: H550 and consent of department. Individual application of student's area of study to the solution of a problem under supervision of an approved advisor; not open to students who select a thesis program.

AMID–H 598 Research (1–3 cr.) P: H550, a course in statistics, and consent of department. Independent investigation in area of interest under supervision of advisor.

AMID–H 599 Thesis (1–6 cr.) P: H550 or equivalent; one course in statistics. Individual research under supervision of an approved advisor.

Arts Administration

Departmental URL: www.iuartsadmin.info

Curriculum

Degree Offered

Master of Arts

Designed to train men and women for leadership in arts centers, arts commissions and councils, and performing and visual arts organizations of all kinds.

Admission Requirements

An undergraduate degree in fine arts, music, theatre and drama, business, or economics, with an outstanding academic record strongly recommended. Graduate Record Examination General Test (verbal and quantitative portions required). Fall enrollment only.

Course Requirements

A minimum of 45 credit hours including Arts Administration Y511, Y515, Y525, Y530, Y535, Y550, Y650, and Y750; Business L575; and SPEA V525 and V558; plus 9 credit hours of electives to be selected in consultation with the program director (see listings below for suggested acceptable courses).

Grades

A grade point average of 3.0 (B) or higher must be maintained.

Required Schedule of Study

Fall Semester I (13.5 cr.)

- AADM-Y511 Performing Arts Center Management (3 cr.)
- AADM-Y515 Financial Management for the Arts (3 cr.)
- AADM-Y525 Museum Management (3 cr.)
- AADM-Y535 Arts Administration and the Cultural Sector (3 cr.)
- Elective (3 cr.)

Spring Semester II (13.5 cr.)

- AADM-Y502 Orginizational Behavior and Arts Management (3 cr.)
- AADM-Y530 Audience Development and Marketing the Arts (3 cr.)
- BUS-L575 Legal Issues in the Arts (3 cr.)
- Elective (3 cr.)

Fall Semester III (12 cr.)

- AADM-Y650 Seminar in Arts Administration (Capstone) (3 cr.)
- SPEA-V525 Management in the Nonprofit Sector (3 cr.)
- SPEA-V558 Fund Development for Nonprofits (3 cr.)
- Elective (3 cr.)

Summer between semesters II and III OR Spring Semester IV (3 cr.)

- AADM-Y750 Internship (3 cr.)
- Practicum (3 cr.)
- AADM-Y550 Practicum (3 cr.)

Three different 50-hour arts management projects are completed throughout the three semesters of coursework. Students can register for all three credits at once or 1 credit per semester, so long as the total number of credits equals three. Students can register for the Y550 Practicum at any time, but generally register simultaneously with the Y750 Internship.

Opportunities for Non-Majors

Doctoral Minor in Arts Administration

(Required 4 courses, 12 credit hours)

The Ph.D. minor should be negotiated with the School of Public and Environmental Affairs (SPEA), Doctoral Advisor in Arts Administration, Dr. Michael Rushton. Students may petition to take Arts Administration courses (AADM-Y) as long as Arts Administration majors are accommodated with room in the classes to authorize non-majors. For a more research-oriented minor, the student should work with the SPEA Director of Doctoral Programs to construct an independent minor including doctoral research seminars.

The Ph.D. Minor is required to take the following courses:

- AADM-Y535 Arts Administration and the Cultural Sector (by permission)
- SPEA-V525 Management for the Nonprofit Sector
- SPEA-V558 Fund Development for Nonprofits

Select one additional course from the following to complete the Ph.D. minor requirements:

SPEA

- V516 Public Management Information Systems
- V519 Database Management Systems
- V521 The Nonprofit and Voluntary Sector
- V540 Law and Public Affairs
- V547 Negotiation and Dispute Resolution for Public Affairs
- V560 Public Finance and Budgeting
- V561/V522 Human Resources Management
- V562 Public Program Evaluation
- V569 Managing Interpersonal Relations
- V602 Strategic Management of Public and Nonprofit Organizations

ARTS ADMINISTRATION – AADM

- Y412 Opera Management
- Y502 Organizational Behavior and Arts Management
- Y505 Programming in the Performing Arts
- Y511 Performing Arts Center
- Y515 Financial Management for Artistic Organizations
- Y530 Audience Development and Marketing the Arts
- Y555 IT Applications for the Arts
- Y559 Public Policy and the Arts
- Y564 The Economics and Administration of Artistic Organizations
- Y500 Topics courses (topics vary from semester to semester) Current topics include: Repertoire Appraisal for Arts Managers

Doctoral Advisor, Arts Administration Faculty

Dr. Michael Rushton, mirushto@indiana.edu, (812) 855-2947

Program Coordinator, Arts Administration Staff

Megan Starnes, merflynn@indiana.edu, (812) 855-0282

Jacobs School of Music Master's Outside Field of Study

(Required 2 courses, 6 credit hours)

The Master's in Outside Field of Study should be negotiated with the Jacobs School of Music with permission from the Arts Administration Department and upon advice from Dr. Michael Rushton.

Jacobs School of Music Graduate Academic Advising office Merrill Hall 011; (812) 855-1738

Doctoral Advisor, Arts Administration Faculty

Dr. Michael Rushton,mirushto@indiana.edu, 812-855-2947

Faculty

Curriculum Courses Faculty

Director

Associate Professor Michael Rushton*

Program Coordinator

Megan Starnes, tshockle@indiana.edu

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Kirsten A. Grønbjerg* (Public and Environmental Affairs), Arlen Langvardt (Business)

Associate Professor

Michael Rushton* (Public and Environmental Affairs)

Assistant Professor

Beth Gazley (Public and Environmental Affairs)

Clinical Professor

Christopher Hunt (Public and Environmental Affairs)

Lecturer

Monika Herzig (Public and Environmental Affairs)

Courses

AADM–L 575 Legal Issues in the Arts (3 cr.) Examines legal interests and rights of composers, writers, performing artists, visual artists, and arts organizations. Explores a broad range of legal considerations pertaining to relationships between parties in arts-oriented contexts. Topics addressed include: copyright, trademark, and right of publicity law; defamation and invasion of privacy law; advertising law; First Amendment issues for artists and arts administrators; contract law as applied to arts-related agreements; personal property law; and legal issues associated with differing forms of arts organizations.

AADM–V 525 Management in the Nonprofit Sector (3 cr.) The course is designed to provide current and future nonprofit managers and leaders with an overview of a range of nonprofit management concerns and practices. Course projects and discussions expand students' management skills, analytical tools, and knowledge. Students take the perspectives of nonprofit managers, volunteers, board members, policy makers, donors, and clients.

AADM–V 558 Fund Development for Nonprofits (3 cr.) This course examines important aspects of the fundraising process for nonprofit organizations—key theoretical foundations and general fundraising principles as well as a variety of fundraising techniques, sources of donations, and aspects of managing the fundraising process. The course combines applied and conceptual readings and provides students with opportunities to apply concepts and techniques through a series of service-learning portfolio assignments in collaboration with area nonprofit organizations. The assignments are designed to cover initial efforts to develop a comprehensive fund-development plan for a nonprofit organization.

AADM–Y 412 Opera Management (3 cr.) Course focuses on the business aspects of running an opera company, from contracting artists to marketing and promotion. Course also covers repertoire selection, casting, coaching, directing, rehearsing, design and execution of scenery, costumes, properties, lighting, technical production. A graduate-level elective for the AADM core.

AADM–Y 500 Topics in Arts Administration (1–6 cr.) Selected research and discussion topics organized on a semester-by-semester basis.

AADM–Y 505 Programming the Performing Arts (3 cr.) The course examines how programming relates to marketing and public relations; the role of programming in the public and professional identity of artists and arts organizations; the external factors that condition program choice; and how programming affects relationships with society and the arts community on local, national, and international levels.

AADM–Y 511 Performing Arts Center Management (3 cr.) This course focuses on the aspects of managing a performing arts program and facility. Indiana University Auditorium and other performing arts facilities will serve as laboratories to provide you with a balance between academic and real-world issues.

AADM–Y 515 Financial Management for the Arts (3 cr.) The course introduces students to the role of financial management in the modern not-for-profit organization. This course covers applications of budgeting, financial and managerial accounting principles, and procedures and financial analysis for nonprofit organizations. Materials covered should be considered required knowledge for the mid-to-senior-level arts administrator.

AADM–Y 520 Cultural Property Management (3 cr.) The course examines cultural property management issues such as the missions, policies, and procedures of institutions large and small, public and private. Field trips, lectures, and discussions will provide an understanding of museums, cultural foundations, and the commercial art world.

AADM–Y 525 Museum Management (3 cr.) Course addresses general management of museums. The museum, its legal status, the building, management and staff, goals and objectives, fundraising and budgeting, collection and exhibitions, education and community outreach.

AADM–Y 530 Audience Development and Marketing the Arts (3 cr.) Course includes basic marketing principles as well as audience development and marketing strategy. In addition to introducing the fundamentals of marketing, it fosters and encourages the thought processes necessary to market the products/services that are creative arts.

AADM–Y 535 Arts Administration and the Cultural Sector (3 cr.) In this course students learn about the market structure of the cultural sector. Among the many questions we try to answer are: What makes the arts different from other goods and services in the marketplace? What do we know about consumers of the arts, and how they become informed about different books, films, or performances? What is the system that determines which works of art are exhibited or published and which fall by the wayside? Who bears the burden of the risk in a new venture?

AADM–Y 540 Computer Applications for the Arts (1.5 cr.) Computer applications concentrates on acquiring usable skills with applications found in the Microsoft Office XP suite. Course offers the general management professional an overview of technology itself and the technology management issues likely to be encountered in professional practice

AADM–Y 550 Practicum in Arts Administration (3 cr.) Provides hands-on managerial and administration experiences in three different community and campus arts organizations including: Musical Arts Center, Department of Theatre and Drama, IU Auditorium, IU Foundation, IU Art Museum, Mathers Museum of World Cultures, IU School of Music, African American Arts Institute, Bloomington Area Arts Council, Bloomington Playwrights Project, School of Fine Arts Gallery, Lotus World Music and Arts Festival, and the Buskirk-Chumley Theater.

AADM–Y 559 Public Policy and the Arts (3 cr.) This course considers the principal aspects of cultural policy in the U.S. and elsewhere. Topics include arts education, the ends and means of government funding for the arts, multiculturalism, freedom of expression, copyright, other legal rights of artists, international trade in cultural goods, and international treatises on cultural diversity.

AADM–Y 564 Economics and Administration of Artistic Organizations (3 cr.) In this course students analyze the unique challenges facing arts organizations in the public, nonprofit, and for-profit sectors. Among other topics, the course deals with the multiple and often conflicting goals faced by arts organizations, consumer demand and price setting, experimentation and innovation, and setting the rules for decision-making and oversight.

AADM–Y 626 Desktop Computer Communications (1.5 cr.) Instructs the arts administration professional in using desktop computer applications to create printed and Web-based materials that promote effective communications. The course provides instruction in design theory, page layout, Web design, digital photo editing, graphics, desktop publishing, and Web publishing as used in creating promotional materials.

AADM–Y 650 Seminar in Arts Administration (3 cr.) The seminar provides a capstone experience for students finishing the Master's Degree in Arts Administration. The emphasis is on the application of the concepts covered throughout the program with a detailed look at leadership issues facing the arts administrator. The seminar/workshop involves the promotion of the arts: planning, management, labor relations, fundraising, funding sources, communications, and similar topics in relation to arts centers, museums, and performing arts organizations. Special emphasis is placed on strategic planning. Course includes a few guest speakers from major arts organizations.

AADM–Y 680 Readings in Arts Administration (arr. cr.) P: Consent of instructor and departmental chairperson. Supervised readings in arts administration.

AADM–Y 690 Independent Study in Arts Administration (arr. cr.) P: Consent of instructor and department chairperson.

AADM–Y 750 Internship in Arts Administration (3 cr.) A minimum 280 hours of field work or internship in a managerial office of a museum, theatrical or musical organization, or community, state, regional, or national arts council is required. The internship is ordinarily taken after the first academic year in the summer or after the third semester of coursework during the spring semester.

Elective Courses

At least 9 graduate-level credit hours suggested but not limited to:

AADM: Arts Administration
Y412 Opera Management
Y500/V450 Topics Courses: Repertoire Appraisal for Arts Managers
Y505 Programming the Performing Arts
Y555 IT Applications for the Arts
Y559/V459 Public Policy and the Arts
Y564/V464 Economics and Administration of Artistic Organizations
Y680/Y690 Readings in Arts Administration/Independent Study

SPEA: School of Public and Environmental Affairs
V521 The Nonprofit & Voluntary Sector
V522 Human Resource Management in Nonprofit
V523 Civil Society and Public Policy
V541 Cost Benefit Analysis
V547 Negotiation and Dispute Resolution
V550 NGO Management in Comparative Perspective
V557 Proposal Development and Grant Administration
V561 Public Human Resources Management
V562 Public Program Evaluation
V569 Managing Interpersonal Relations
V570 Labor Relations
V602 Strategic Management for Government and Not for Profits
V611 Design of Information Systems

BUS: Kelley School of Business
F509 Financial Analysis for Corporate Decisions (1.5)
L508 Legal Issues, Human Resource Management
M512 Marketing Strategy (1.5)
M544 Managing Advertising and Sales Promotion
M550 Customer Oriented Strategies (1.5)
W504 New Venture Business Planning (1.5)
W505 Power Persuasion Influence Negotiation Strategy (1.5)
W520 Turnaround Management (1.5)
W550 Management Consulting
Z518 Labor/Employee Relations

EDUC: Education
Z511 Non-Studio Approaches to Art Education
Z550 Community Arts Programming

JOUR: Journalism
J531 Public Relations for Nonprofits
J542 Arts, Media, and Society
J552 Reporting the Arts
J563 Computerized Publications

ANTH: Anthropology
A403/503 Introduction to Museum Studies
A405 Museum Methods
A408 Museum Practicum

FINA: Fine Arts
A442 Twentieth-Century Art 1900-1924
A449 Twentieth-Century Art 1925-Present
R590 Seminar in the Visual Arts

THTR: Theatre and Drama
T573 Studies in Modern and Contemporary Theatre
T428/700 Production and Event Management

MUS: Jacobs School of Music
M525 Survey of Operatic Literature
M527 Symphonic Literature
M561 History & Literature of Opera I
M562 History & Literature of Opera II
M563 History & Literature of Opera III
M564 History & Literature of Opera IV
M653 Baroque Music

SLIS: School of Library and Information Science
L540 Foundations of Information Architecture
L546 User-Centered Database Design
L548 Computer Programming for Information Management

L561 The Information Industry
L566 Digital Libraries
L571 Information Architecture for the Web

CMCL: Communication and Culture
C560 Motion Picture Production
C592 Media Genres
C596 National Cinemas

TEL: Telecommunications

T521 Telecommunications Management
T522 Managing the Creative Process
T570 Art Entertainment & Information
T571 Applied Cognitive and Emotional Psychology (course goal to provide media producers/artists with research findings to help them make more effective messages/art)
T580 Interactive Storytelling & Computer Games
T601 Topical Seminar (Spring 2007, Synthetic Worlds)
T642 Communication Campaigns

Electives
Electives chosen must be graduate-level courses or the equivalent. Upper level undergraduate courses may count toward graduation only if the student has prior approval and written documentation from the professor of the course verifying that additional, graduate-level work will be required. Documentation is approved by the University Graduate School.

Astronomy

College of Arts and Sciences

Departmental E-mail: astdept@indiana.edu

Departmental URL: www.astro.indiana.edu

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy. The department also participates in the Ph.D. program in astrophysics.

Research Facilities

Members of the Department of Astronomy use the WIYN (Wisconsin-Indiana-Yale-National Optical Astronomy Observatories) 3.5m and 0.9m telescopes at Kitt Peak National Observatory near Tucson, Arizona, to carry out research in optical astronomy. The advanced-technology 3.5m telescope delivers superb image quality over a wide field and is also optimized for multiobject spectroscopy, including a high-spectral-resolution mode and high-spatial-resolution imaging. Indiana University holds a 17 percent share of the WIYN facility. Two fully robotic telescopes are located in the Morgan-Monroe State Forest 16 miles from campus. These are a 0.4m telescope that is used for automated CCD photometry and a new 1.25m telescope to be used for automated spectroscopy. A remote observing center in the department is equipped for communication with both the WIYN and local telescopes. The High-Energy Astrophysics Group carries out research with underground, spacecraft, and balloon-borne detectors that are developed within the department. Several instrument development labs and machine shops support the optical and high-energy research programs.

Research in the Department of Astronomy is supported by excellent computational facilities. Students, faculty, and research staff have fast desktop machines with 1-Gbps network connectivity within the department and to the outside world. The department maintains several multi-Terabyte file servers and a number of high-performance computer platforms for simulations and data analysis. Indiana University operates BigRed, one of the fastest university-owned supercomputers in the world, as well as SMP clusters called Quarry and Libra. These computational research capabilities are supported by two massive data processing and storage systems: the Data Capacitor, which is a fast file system that can manipulate up to 0.5 Petabytes of data simultaneously, and the Massive Data Storage Service, which can permanently archive more than 4 Petabytes of data.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Good preparation for graduate work in astronomy or astrophysics requires the same training in physics and mathematics needed for a bachelor's degree in physics, plus a familiarity with the subject matter of introductory astronomy or astrophysics courses, such as A221-A222 or A451-452. An undergraduate major in astronomy, astrophysics, physics, or mathematics that has provided such a background is usually required for admission. Any necessary undergraduate courses to strengthen students' backgrounds will not receive graduate credit.

All graduate applicants must submit Graduate Record Examination scores on both the General Test and the Subject Test in physics. Scores should be sent directly to the department, not to the University Graduate School.

Master of Arts Degree

Course Requirements

A minimum of 30 credit hours, including any three astronomy graduate core courses (see below).

Thesis

A thesis may be required, at the discretion of the department. Students for whom the thesis requirement is waived must still complete a project that demonstrates research proficiency.

Final Examination

An oral examination must be passed covering general astronomy at the A451-452 level, the core courses applied toward the degree, and the thesis research.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours. Students are required to take six of the following core courses: A505, A520, A540, A550, A570, A575, and A580. Normally, these courses are offered at the rate of three courses per year, and they may be taken in any sequence. The remainder of the graduate program consists of elective courses, seminars on advanced topics, research, and dissertation.

Grades

Grades below B (3.0) in core courses may be counted toward degree requirements only at the discretion of the department.

Minor

Most doctoral candidates in astronomy minor in physics or scientific computing. Other minors may be permitted at the discretion of the department.

Qualifying Examination

In order to be advanced to candidacy, a student must pass a written examination covering the core course material plus general astronomy at the A451-452 level. The examination may be taken no more than twice. The examination is usually offered once a year in late May/ early June. In its current form, it consists of one five-hour exam covering the material in the core courses and general astronomy knowledge at the undergraduate level.

Candidacy Seminar

The candidacy seminar is an oral presentation to the research committee, usually consisting of a thesis proposal and/or a summary of past research activity. It must be completed within a year of passing the written qualifying examination (typically by the start of the fourth year of residence).

Final Examination

Oral defense of the dissertation.

Ph.D. Minor in Astronomy

Students from other departments who wish to minor in astronomy must complete at least 9 credit hours of graduate courses in astronomy at the 500 level with an average GPA of B (3.0) or higher. The student should discuss proposed course work for the minor with an advisor from the Department of Astronomy, usually the Director of Graduate Studies. One astronomy course at the 400 level (listed below) may be substituted for one of the 500 level courses upon approval by the student's astronomy advisor.

Faculty

Chairperson

Professor John J. Salzer

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Haldan N. Cohn*, Richard H. Durisen* (Emeritus), R. Kent Honeycutt* (Emeritus), Hollis R. Johnson* (Emeritus), Phyllis M. Lugger*, Stuart L. Mufson*, Catherine A. Pilachowski*, John J. Salzer*

Associate Professors

Martin S. Burkhead* (Emeritus), Constantine P. Deliyannis*, Liese van Zee*

Assistant Professor

Katherine L. Rhode*

Senior Scientists

Charles Bower* (Physics), Thomas Y. Steiman-Cameron

Research Scientists

Samir Salim, Jonathan Thornburg

Graduate Advisor

Professor Liese van Zee*, Swain Hall West 319, (812) 855-0274

Courses

AST–A 451 Stellar Astrophysics (3 cr.) P: Calculus, Physics P301 or equivalent, A222 or consent of instructor. Application of basic physical principles to investigation of the solar system, stars, and the Milky Way galaxy.

AST–A 452 Extragalactic Astrophysics (3 cr.) P: Calculus, Physics P301 or equivalent, A222 or consent of instructor. Application of basic physical principles to investigation of galaxies and cosmology.

AST–A 453 Topics in Astrophysics (3 cr.) P: Calculus, P301 or equivalent, A222 or consent of instructor. Topics in astrophysics not covered extensively by other courses. The topic will vary depending on instructor. Possible topics include celestial mechanics, astrobiology, stellar interiors, stellar atmospheres, stellar populations, galaxy dynamics, and cosmology.

AST–A 505 Principles and Techniques of Observational Astronomy (4 cr.) P: Consent of instructor. Principles and techniques of astronomical data acquisition and reduction. Practical experience in CCD photometry, spectroscopy, and astronomical applications of electronic detectors.

AST–A 520 The Interstellar Medium (3 cr.) P: Consent of instructor. Structure and dynamics of the interstellar medium; review of observations and theory of interstellar gas, dust, and radiation.

AST–A 540 Stellar Atmospheres (3 cr.) P: Consent of instructor. Structure of atmospheres and formation of spectra.

AST–A 550 Stellar Interiors (3 cr.) P: Consent of instructor. Physical properties of stellar material; structure and evolution of stars.

AST–A 570 Galactic Dynamics (3 cr.) P: Consent of instructor. Principles of stellar dynamics. Analytic and computer methods. Applications to the galaxy and its star clusters.

AST–A 575 Structure and Evolution of Galaxies (3 cr.) P: Consent of instructor. Structure and evolution of galaxies, large-scale clustering of galaxies, active galactic nuclei, and quasars.

AST–A 580 Physical and Observational Cosmology (3 cr.) P: Consent of instructor. Observational basis for current cosmological theory. Early universe evolution, cosmic microwave background radiation, formation of cosmic structure.

AST–A 590 Graduate Reading Course (arr. cr.) Independent reading in astronomy and astrophysics.

AST–A 770 Seminar in Astrophysics (1–4 cr.) Selected topics of current research interest in astrophysics; includes topics such as stellar astrophysics, interstellar

matter, planetary physics, high-energy astrophysics, and extragalactic astrophysics.

AST–A 780 Seminar in Astronomy (arr. cr.) S/F grading. Selected topics of current research interest in astronomy, such as observational techniques, instrumentation, galactic and extragalactic astronomy, and cosmology.

AST–A 890 Introduction to Research (arr. cr.) Literature and methods of astronomical research.

AST–A 899 Research (arr. cr.) Observational and theoretical investigations of current problems.

Astrophysics Courses

AST–G 630 Nuclear Astrophysics (3 cr.) P: A451, P453-P454, or consent of instructor. R: A550, P511. Applications of nuclear physics to astronomy. Fundamental properties of nuclei and nuclear reactions. Element synthesis and energy generation in the big bang, stellar interiors, and supernovae. Discussion of current topics: cosmological nucleosynthesis, solar neutrino flux, explosive nucleosynthesis, high-energy nuclear processes.

AST–G 650 High Energy Astrophysics (3 cr.) Covers cosmic rays from the perspective of astrophysics and high-energy particle physics. Examples of topics that may be included are the production, propagation, and interactions of cosmic rays as well as the experimental detection of cosmic rays. Subtopics include atmospheric and solar neutrinos, magnetic monopoles, point sources of cosmic rays, neutrino oscillations, air showers, and stellar collapse detection.

AST–G 750 Topics in Astrophysical Sciences (1–3 cr.) A seminar in astrophysics with special emphasis on subjects involving more than one department. Examples of such topics include planetology, nucleosynthesis, nuclear cosmochronology, isotopic anomalies in meteorites, particle physics of the early universe, and atomic processes in astrophysical systems.

Astrophysics

College of Arts and Sciences

Departmental E-Mail: astdept@indiana.edu

Departmental URL: www.astro.indiana.edu

Curriculum

Degree Offered

Doctor of Philosophy

The astrophysics program is administered jointly by the Department of Astronomy and the Department of Physics through the interdepartmental committee named above. Interested students must first gain admission to one of these departments and then petition the committee for entrance into the program after establishing departmental residency. Students may qualify for a master's degree in astronomy or physics while in this program. Doctoral dissertations in astrophysics may be directed by any qualified member of the Department of Astronomy or Physics graduate faculty.

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

A student should have the combined admission requirements of doctoral students in astronomy and physics; i.e., a thorough undergraduate training in physics and mathematics plus familiarity with general astronomy at the level of A221-A222 or, preferably, A451-A452. Deficiencies must be removed early, usually without graduate credit.

Course Requirements

A total of 90 credit hours, including the following courses or their equivalents: Physics P506, P511, P521, and P556; four courses from among Astronomy A505, A520, A540, A550, A570, A575, and A580; one course from among P507, P512, P637, G630, and G650 or a fifth astronomy core course; and dissertation.

Minor

By meeting the course requirements for this degree, a student from the Department of Astronomy will automatically fulfill the requirements for a minor in physics, and a student from the Department of Physics will automatically fulfill the requirements for a minor in astronomy.

Foreign Language/Research-Skill Requirement

A student in the astrophysics program must meet the foreign language/research-skill requirements (if any) of the department of residence.

Grades

Grades below B (3.0) in astronomy and physics courses may be counted toward degree requirements only with the consent of the astrophysics committee.

Qualifying Examination

A student must pass specially designated parts of the qualifying examinations of both departments—specifically, half of the physics qualifying examination, which emphasizes classical mechanics, electromagnetism, and statistical physics—plus part of the astronomy qualifying examination. For the astronomy qualifier, the student is required to answer one of two general astronomy questions and 4 of the remaining 8 questions. The examination requirements must be satisfied by the end of the student's sixth semester in residence. The department of residence may also specify its own deadline for passage of the examination it administers.

Final Examination

Oral defense of the dissertation.

Faculty

Director

Professor Stuart L. Mufson*

Interdepartmental Graduate Committee on Astrophysics

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Andrew Bacher* (Emeritus, Physics), Haldan Cohn* (Astronomy), Richard H. Durisen* (Emeritus, Astronomy), Charles J. Horowitz* (Physics), Alan Kostelecky* (Physics), Stuart L. Mufson* (Astronomy), James Musser* (Physics)

Associate Professor

Constantine P. Deliyannis* (Astronomy)

Senior Scientist

Charles Bower* (Physics)

Academic Advisor

Professor Stuart L. Mufson, Swain Hall West 322, (812) 855-6917

Courses

AST–G 630 Nuclear Astrophysics (3 cr.) P: A451, P453-P454, or consent of instructor. R: A550, P511. Applications of nuclear physics to astronomy. Fundamental properties of nuclei and nuclear reactions. Element synthesis and energy generation in the big bang, stellar interiors, and supernovae. Discussion of current topics: cosmological nucleosynthesis, solar neutrino flux, explosive nucleosynthesis, high-energy nuclear processes.

AST–G 650 High Energy Astrophysics (3 cr.) Covers cosmic rays from the perspective of astrophysics and high-energy particle physics. Examples of topics that may be included are the production, propagation, and interactions of cosmic rays as well as the experimental detection of cosmic rays. Subtopics include atmospheric and solar neutrinos, magnetic monopoles, point sources of cosmic rays, neutrino oscillations, air showers, and stellar collapse detection.

AST–G 750 Topics in Astrophysical Sciences (1–3 cr.) A seminar in astrophysics with special emphasis on subjects involving more than one department. Examples of such topics include planetology, nucleosynthesis, nuclear cosmochronology, isotopic anomalies in meteorites, particle physics of the early universe, and atomic processes in astrophysical systems.

Institute for Biblical and Literary Studies

College of Arts and Sciences Curriculum

Program Information

The Institute for Biblical and Literary Studies is an interdisciplinary consortium that aims to bring together the critical study of the Bible, the history of biblical interpretation, and the theory and practice of literary criticism. Depending on background and interest, students may concentrate on biblical texts and languages, literary criticism, or the history and theory of interpretation. Study of ancient languages is strongly encouraged. Students with previous training in biblical studies will be advised to devote more time to courses in literary theory and Western literature; those with a stronger background in classical or modern literature will be advised to concentrate on the biblical text and its cultural setting. The institute offers a Ph.D. minor and a certificate that may be earned concurrently. Students participate in a regular seminar (I600) which, like most institute courses, combines close reading of specific texts with larger issues of methodology. Prospective students interested in pursuing the M.A. or Ph.D. degree are urged to apply first to one of the affiliated departments, such as comparative literature (for literary theory) or religious studies (for biblical studies).

Ph.D. Minor in Biblical Literature

The Ph.D. minor in biblical literature is available to all doctoral students not specializing in biblical studies; four courses in biblical literature and in the history of biblical interpretation are required. Courses should be selected in consultation with the director of the institute.

Grades

Courses in which a student receives less than a B (3.0) will not count toward the minor.

Graduate Certificate in Biblical and Literary Criticism

The certificate is available to doctoral students in all departments and to special students from outside Indiana University who wish to do advanced interdisciplinary work in biblical and literary studies.

Course Requirements

Eight courses in biblical literature, the history of biblical interpretation, and the theory and practice of literary criticism, including I600. The selection of courses should be made in consultation with the director of the institute. In certain cases, two of the eight courses may be in a biblical language. Courses that study biblical or exegetical sources in a national literature may also be counted.

Language Requirement

Proficiency in biblical Hebrew or Greek, to be certified by the completion of N472 or G308 or their equivalent, or by an examination administered by the relevant language department.

Grades

Courses in which a student receives less than a B (3.0) will not count toward the certificate.

Faculty

Director

Associate Professor Herbert Marks*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Willis Barnstone* (Emeritus, Comparative Literature, Spanish and Portuguese), Linda Dégh* (Emerita, Folklore)

Professors

James Ackerman* (Emeritus, Near Eastern Languages and Cultures, Religious Studies), Ernest Bernhardt-Kabisch* (Emeritus, Comparative Literature, English), David Brakke* (Religious Studies), Henry R. Cooper Jr.* (Slavic Languages and Literatures), Alfred David*

(Emeritus, English), Kenneth R. R. Gros Louis* (Emeritus, Comparative Literature, English), James Halporn* (Emeritus, Classical Studies), J. Albert Harrill* (Religious Studies), Shaul Magid* (Jewish Studies, Religious Studies), Carroll Nelson* (Emeritus, Classical Studies)

Associate Professors

Paul Gutjahr* (English), Herbert Marks* (Comparative Literature, English, Near Eastern Languages and Cultures), Nicholas Williams* (English)

Assistant Professors

Chaya Halberstam (Religious Studies), Miryam Segal (Comparative Literature, Jewish Studies)

Academic Advisor

Associate Professor Herbert Marks*, Ballantine Hall 914, (812) 855-7070

Courses

Biblical and Literary Studies

IBLS-I 600 Colloquium in Biblical and Literary Studies

Anthropology

E451 Myth and Legend (3 cr.)
E455 Anthropology of Religion (3 cr.)

Classical Studies

C405 Comparative Mythology (4 cr.)
G301-G302 Classical Greek: Accelerated Courses (3-3 cr.)
G308 Readings in Biblical Greek (3 cr.)
G611 Greek Papyrology (4 cr.)
L505 Medieval Latin (4 cr.)

Comparative Literature

C501 Introduction to Contemporary Literary Studies (4 cr.)
C503 Topics in World Criticism and Theory I (4 cr.)
C504 Topics in World Criticism and Theory II (4 cr.)
C505 Western Literary and Intellectual Traditions to 1500 (4 cr.)
C506 Western Literary and Intellectual Traditions after 1500 (4 cr.)
C545 The Bible and Western Tradition (4 cr.)
C580 History and Theory of Translation (4 cr.)
C601 Studies in the History of Theory and Criticism (4 cr.)
C602 Contemporary Theoretical Issues and Approaches (4 cr.)
C641 Literature in Its Intellectual and Cultural Contexts (4 cr.)
C643 Literary Studies and the Social Sciences (4 cr.)
C644 Literary Studies and Psychoanalysis (4 cr.)
C645 Literary Studies and Religion (4 cr.)
C801 Directed Research in Comparative Literature (cr. arr.)

English

G660 Stylistics (4 cr.)
L605 Critical and Interpretive Theory (4 cr.)
L608 History of Literary Criticism (4 cr.)
L705 Problems in Language, Literature, and Literacy (4 cr.)
L707 Studies in Literary Theory and Criticism (4 cr.)

Folklore

F527 Folk Poetry and Folksong (3 cr.)
F545 Folk Narrative (3 cr.)
F734 Folklore and Literature (3 cr.)

French and Italian

F564 Approaches to Literary Criticism (3 cr.)
F584 Stylistics and Semantics (3 cr.)
Near Eastern Languages and Cultures
N416 Comparative Talmudic Literature (3 cr.)
N471-N472 Biblical Hebrew I-II (3-3 cr.)
N586 Medieval Hebrew Literature (3 cr.)

Religious Studies

R511 Religion of Ancient Israel (3 cr.)
R521 Studies in the New Testament (3 cr.)
R531 Studies in Christian History (3 cr.)
R532 Studies of Religion in American Culture (3 cr.)
R541 Studies in the Jewish Tradition (3 cr.)
R590 Directed Readings in Religious Studies (cr. arr.)
R610 Studies in Biblical Literature (4 cr.)
R663 History of Biblical Interpretation (3 cr.)

Semiotic Studies

S601 Introduction to Semiotic Studies (3 cr.)

Biochemistry, Interdisciplinary

Molecular and Cellular Biochemistry, Biology, Chemistry, Medical Sciences, Optometry, Psychological and Brain Sciences

College of Arts and Sciences

Departmental E-mail: bchem@indiana.edu

Departmental URL: www.indiana.edu/~bchem

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Undergraduate coursework must include two semesters of organic chemistry and one semester of biochemistry. Though not required, one semester of molecular biology and two semesters of biology are recommended. One semester of (bio) physical chemistry is strongly recommended. Deficiencies in required courses must be removed during the first year of graduate study. Students seeking admission should apply directly to the Interdisciplinary Biochemistry Graduate Program. Applications must include a complete entrance form, letters of recommendation, undergraduate transcripts, and scores on the Graduate Record Examination General Test. (While it is not required that applicants also submit scores on the Subject Test in Biochemistry, it is recommended that they do so.)

Master of Science Degree

Course Requirements

A minimum of 30 credit hours, of which 12 credit hours must be in biochemistry graduate coursework other than

B880 and B600. Students are required to rotate (B580) in two laboratories in the fall semester and to participate in the biochemistry research club during their second year of the program. The graduate advisor must approve all coursework.

Thesis

Required.

Final Examination

Oral, covering thesis and major.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, of which 22.5-23 are satisfied by the core courses (B501, B502, B503, B504, B506, and two semesters of B580), Grant Writing (B680), Research Ethics (B680 or G601), and two semesters of B600. Six additional elective hours are required in either the major or minor field. Students must also give two departmental seminars, generally in their 4th and 5th years of graduate study. In addition, students must complete an internal minor, or meet the minor requirements of a suitable outside program. The sequence of courses comprising the minor must be approved by the student's advisory committee.

At the end of the first year, each student selects a research advisor and laboratory. Together with the advisor, the student also selects an advisory committee of three or four faculty members appropriate to the student's intended degree including one from the prospective minor field (see below). This advisory committee guides and monitors the student's subsequent independent work and guides the student's selection of advanced courses. The biochemistry graduate program requires that each student meet with the advisory committee at least once per year.

Minor

The doctoral student in biochemistry may minor in any appropriate discipline or in a specialized track within the Biochemistry Program. For an internal minor, the minor shall consist of 6 credit hours of the courses listed in each track below.

(1) Cellular and Medical Biochemistry

Biochemistry:

- B601 Nucleic Acids
- B602 Advanced Protein Biosynthesis and Processing
- B605 Structure and Function of Membranes
- B680 Special Topics: Electron Microscopy
- B680 Special Topics: Structural Bioinformatics
- B680 Special Topics: Virology

Biology:

- L585 Molecular Genetics
- L586 Molecular Analysis of Cell Biology

Medical Sciences:

- B801 Molecular and Cellular Biochemistry
- B802 Metabolism and Signal Transduction

(2) Chemical and Structural Biology

Biochemistry:

- B603 Advanced Macromolecular Structure and Interactions
- B604 Structural Methods
- B605 Structure and Function of Membranes
- B680 Special Topics: Drug Design
- B680 Special Topics: Electron Microscopy
- B680 Special Topics: NMR
- B680 Special Topics: Structural Bioinformatics

Biology:

- L586 Molecular Analysis of Cell Biology

Chemistry:

- C540 Organic Reactions Mechanisms
- C612 Mass Spectrometry

Grades

Every student must maintain a minimum GPA of 3.2 in order to remain in good standing. Courses to be counted toward the Ph.D. degree must be passed with a grade of B– (2.7) or better.

Qualifying Examinations

In the fifth semester, students meet with their examination committee to review past performance and to evaluate plans for completing the Ph.D. Includes written, oral, and research components. All full-time Ph.D. students must take the qualifying examination by the end of the fifth semester.

Satisfactory Progress toward a Degree

After passing the preliminary examination, for a student to remain in "good standing" requires that sufficient progress be made toward completing a thesis. If the research advisory committee judges progress to be unsatisfactory, probation may be recommended. At the end of the probationary period (usually a semester), probation will be lifted if the advisory committee judges the student's progress to be satisfactory. If the advisory committee judges the student's progress to remain unsatisfactory, then the student will be required to leave the program.

Final Examination

Oral, covering dissertation, major, and minor. The final requirement is a Ph.D. thesis, which must be defended in a public research seminar and in a meeting of the research advisory committee.

Other Provisions

All students enrolled in the Ph.D. program will be required to serve as associate instructors for at least one semester, regardless of their source of support; they must complete formal instruction in teaching methods in order to enhance their teaching skills. It is the conviction of the program that teaching experience is a vital aspect of graduate education, whether or not the student intends to pursue a teaching career after attainment of the desired degree.

Ph.D. Minor in Biochemistry

Students from other programs who wish to minor in biochemistry must complete at least 6 credit hours of

graduate coursework in biochemistry, excluding B502, B580, and B600, with an average of B (3.0) or above.

Faculty

Director of Graduate Studies
Professor Jim Drummond

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Class of '54

Carl Bauer* (MCB/Biology)

Carlos Miller Professor

Craig Pikaard* (MCB/Biology)

Clyde Culbertson Professor of Biology

Yves Brun* (Biology)

Lilly Chemistry Alumni Chair

Milos Novotny* (Chemistry)

Linda and Jack Gill Chairs of Neuroscience

Cary Hsing Chao Lai*, (Psychological and Brain Sciences), Kenneth P. Mackie* (Psychological and Brain Sciences)

Robert and Marjorie Mann Chair

David Clemmer* (Chemistry)

Standiford H. Cox Professor

Richard DiMarchi* (Chemistry)

Distinguished Professors

Carl Bauer* (MCB/Biology), Milos Novotny* (Chemistry), Peter Ortoleva* (Chemistry)

Professors

Joseph Bonanno* (Optometry), Jose Bonner* (Biology), Yves Brun* (Biology), Peter Cherbas* (Biology), David Clemmer* (Chemistry), Richard DiMarchi* (Chemistry), Patricia Foster* (Biology), Clay Fuqua* (Biology), David Giedroc* (Chemistry), Cheng Kao* (MCB), Kenneth Nephew* (Cellular and Integrative Physiology, Medical Sciences), Craig Pikaard* (MCB/Biology), James Reilly* (Chemistry), Claire Walczak* (Medical Sciences), Theodore Widlanski* (Chemistry), Malcolm Winkler* (Biology), Jeffrey Zaleski* (Chemistry), Adam Zlotnick* (MCB)

Associate Professors

Brian Calvi* (Biology), Lingling Chen* (MCB), David Daleke* (Medical Sciences), Bogdan Dragnea* (Chemistry), Jim Drummond* (MCB), John Foley* (Medical Sciences), Richard Hardy* (Biology), David Kehoe* (Biology), Kyung-Tai Min* (Biology), Martha Oakley* (Chemistry)

Assistant Professors

Heather Bradshaw* (Psychological and Brain Sciences), Pranav Danthi* (Biology), Peter Hollenhorst (Medical Sciences), Heather Hundley (Medical Sciences), Melanie Marketon* (Biology), Tuli Mukhopadhyay* (Biology), Manjari Mazumdar (Medical Sciences), David Nelson* (Biology), Joseph Pomerening* (Biology), Anne Prieto* (Psychological and Brain Sciences), Sidney Shaw* (Biology)

Graduate Advisor

Associate Professor Jim Drummond*, Simon Hall 305C, (812) 856-4184

Courses

BIOC–B 501 Analysis of Biochemical Literature (1.5 cr.) P: Concurrent enrollment in B501 or consent of instructor. Critical evaluation of the biochemical literature, using selected papers as examples; development of written and oral communication skills in the context of literature analysis.

BIOC–B 502 Integrated Biochemistry (3–4.5 cr.) P: Undergraduate biochemistry (equivalent to C483 or C484) or consent of instructor. Basic principles and methodologies of biochemistry; essentials of macromolecular biosynthesis; mechanism-based examination of biochemical aspects of cell biology; material is presented with an integrative approach designed to illustrate the interrelationship of biochemical processes.

BIOC–B 503 Macromolecular Structure and Interaction (3 cr.) P: B501 or undergraduate biochemistry (equivalent to C483 or C484), one semester of undergraduate organic chemistry (equivalent to C341), or consent of instructor. Undergraduate (bio)physical chemistry (equivalent to C481 or C361) is strongly recommended. Principles of inter-and intra-molecular interactions; structural stability of proteins and nucleic acids; thermodynamic and kinetic analysis of complex binding; experimental methods for analysis of macromolecular structure and binding.

BIOC–B 504 Biomolecular Catalysis (3 cr.) P: Undergraduate organic chemistry (equivalent to C342), undergraduate biochemistry (equivalent to C483 or C484), or consent of instructor. Theory and analysis of biochemical catalysis; enzyme kinetics; cofactors; regulation of enzymatic reactions.

BIOC–B 506 Integrated Biochemistry II (1.5 cr.) P: B501 or permission of the instructor. Mechanism-based examination of biochemical aspects of control of protein folding and function, signal transduction, and systems biology.

BIOC–B 580 Introduction to Biochemical Research (3 cr.) P: Graduate standing. Objectives and techniques of biochemical research.

BIOC–B 600 Seminar in Biochemistry (1 cr.) P: B502 or consent of instructor. Advanced critical analysis of the current scientific literature and scientific presentations. Attendance and participation in the weekly biochemistry program seminar series is required.

BIOC–B 601 Advanced Nucleic Acid Biochemistry (1.5 cr.) P: B501 or consent of instructor. Mechanistic analysis of nucleic acid metabolism; specificity and role of DNA polymerases and repair pathways; DNA replication and recombination mechanisms; RNA structural motifs

and physical properties; RNA synthesis and processing in gene expression; catalytic RNA molecules; applications of RNA molecules.

BIOC–B 602 Advanced Protein Biosynthesis and Processing (1.5 cr.) P: B501 or consent of instructor. Detailed analysis of protein synthesis, post-translational modification, and macromolecular assembly, including the role these modifications play in mature protein function, biosynthesis, structure, function, and analysis of complex oligosaccharides.

BIOC–B 603 Advanced Macromolecular Structure and Interactions (1.5 cr.) P: B503 or consent of instructor. Supplements and extends B503: emphasis on stability and folding mechanisms of proteins and nucleic acids and detailed thermodynamic analysis of binding interactions.

BIOC–B 604 Structural Methods (3 cr.) P: B503 or consent of instructor. In biology, structure and function are intimately connected. The aim of this class is to demystify macromolecular structure determination. We will examine X-ray crystallography and EM image reconstruction in detail, solving structures and studying the theoretical underpinnings of each technique. Class will be computer and mathematics intensive.

BIOC–B 605 Structure and Function of Biological Membranes (1.5 cr.) P: B501, B503, or consent of instructor. Biochemistry and biophysics of lipids, membranes and membrane proteins; fundamentals of membrane transport; interfacial catalysis; transmembrane signal transduction.

BIOC–B 680 Special Topics in Biochemistry (1.5–3 cr.) P: Consent of instructor. Topics vary yearly and include the following: physico-chemical techniques in the study of macromolecules; experimental methods in enzymology; organic chemistry of enzymatic reactions and enzyme models; conformational properties and macromolecules.

BIOC–B 880 Research: Biochemistry (arr. cr.) This course is eligible for a deferred grade.

Cross-Listed Courses

Biology

- **L529 Bioinformatics in Molecular Biology and Genetics: Practical Applications (4 cr.)** P: I501, I502, L519, or consent of instructor. Practical experience in a range of data analysis and software engineering methods applied to molecular biology data.
- **L585 Molecular Genetics (3 cr.)** P: L364 and C483 or equivalent. The molecular basis of genetic interactions, with emphasis on microbial systems. The course covers the molecular mechanisms of mutation, suppression, recombination, complementation, etc., as well as mechanisms for gene transfer in bacteria and bacteriophage. The application of genetic analysis to a variety of molecular biological topics is emphasized.
- **L586 Molecular Analysis of Cell Biology (3 cr.)** Critical analysis of recent advances in our understanding of molecular organization of cellular structures and of their mode of function. The primary interest of this course concerns the eukaryotic cell.
- **M525 Topics in Microbial Biochemistry and Physiology (3 cr.)** P: Graduate standing and C483 or M350 or equivalent. The course will consider topics in physiology and biochemistry of eukaryotic and prokaryotic microorganisms. Subjects include membrane physiology and regulatory networks in metabolism and gene expression.

Chemistry

- **C615 Bioanalytical Chemistry (1.5-3 cr.)** P: C511, C512. Survey of modern analytical techniques, including spectrochemical, electrochemical, and separation methods used in biochemical analysis and their applications. (May be given in alternate years).
- **C632 Structure, Function, and Spectroscopy of Metal Ions in Biological Systems (3 cr.)** Introduction to the field of bioinorganic chemistry and spectroscopic methods for determining structure/function relationship of metal ions in biology. Emphasis on oxygen carriers, metal ion transport and storage, as well as oxidoreductases involved in oxygen, hydrogen, and nitrogen metabolism. A discussion of electron transfer proteins, photosystems, and the role of metals in medicine will also be included.

Medical Sciences

- **B801 Molecular and Cellular Biochemistry (3 cr.)** P: Graduate standing and consent of instructor. Biochemistry for medical students, emphasizing structure-function relationships of cellular components, biosynthesis of nucleic acids and proteins, degradation of simple and complex cell constituents, and regulation of cell growth.
- **B802 Metabolism and Signal Transduction (3 cr.)** P: Graduate standing and consent of instructor. Biochemistry for medical students, including signaling pathways, membrane biochemistry, and the metabolism of macromolecules in health and disease with emphasis on clinical applications.

Physics

- **P575 Introductory Biophysics (3 cr.)** P: Two out of three from the following: (1) P221/P222 and P301 or equivalent, (2) C105/C106 or equivalent, and (3) L221 and L312 or equivalent; or consent of instructor. Overview of cellular components; basic structures of proteins, nucleotides, and biological membranes; solution physics of biological molecules, mechanics and motions of biopolymers; physical chemistry of binding affinity and kinetics; physics of transport and signal transduction; biophysical techniques such as microscopy and spectroscopy; mathematical modeling of biological systems.

Neural Sciences

- **N612 Ion Channels and Receptors (3 cr.)** P: Graduate status and consent of instructor. Molecular, biophysical, and biochemical analysis of the major molecules responsible for neural excitability and synaptic transmission: receptor-coupled ion channels, voltage-dependent ion channels, G-protein coupled receptors, transporters, signal transduction pathways, synaptic vesicle-

associated proteins, cytoskeletal proteins, classical and novel neurotransmitters and modulators.

Biology

College of Arts and Sciences

Departmental E-mail: gclearwa@bio.indiana.edu

Departmental URL: www.bio.indiana.edu

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy in ecology and evolutionary biology; Doctor of Philosophy in genetics; Master of Arts and Doctor of Philosophy in microbiology; Doctor of Philosophy in molecular, cellular, and developmental biology; Master of Arts and Doctor of Philosophy in plant sciences; Master of Arts and Doctor of Philosophy in zoology; Master of Science in biotechnology; and Master of Arts for Teachers.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Undergraduate major in one of the biological sciences and course work in the program in which a degree is sought. A degree in a related field (e.g., chemistry, physics, or mathematics) may suffice if appropriate biology courses were included in the student's degree program. Students seeking admission to biology degree programs may apply directly to the Department of Biology or online. Applications must include a complete entrance form, letters of recommendation, undergraduate transcripts, and scores on the Graduate Record Examination General Test. (While it is not required that applicants also submit scores on the Subject Test in Biology, it is recommended that they do so.) The TOEFL score is required if the native language is other than English.

Special Requirement for the M.A. Degree

It is a requirement of the Department of Biology that the M.A. degree be completed within five semesters, although some programs such as the M.A.T. and joint SPEA/ Biology programs allow additional time.

Grades

For all graduate degrees, students must maintain a minimum GPA of B (3.0) in order to remain in good standing in the Graduate School. Courses to be counted toward the degree must be passed with a grade of B- (2.7) or better. To be eligible for financial support, the Department of Biology requires students to maintain a minimum GPA of 3.2.

Ph.D. Qualifying Examination

Includes written, oral, and research components. All full-time Ph.D. students must take the qualifying examination by the end of the fourth week of their fifth semester. In the event of failure or postponement, students may retake the examination once, but no later than the end of the twelfth week of their fifth semester.

Satisfactory Progress Toward a Degree

After passing the preliminary examination, for a student to remain in "good standing" in the Department of Biology requires that sufficient progress be made toward completing a thesis. If the research advisory committee judges progress to be unsatisfactory, probation may be recommended. At the end of the probationary period (usually a semester), probation will be lifted if the advisory committee judges the student's progress to be satisfactory. If the advisory committee judges the student's progress to remain unsatisfactory, then the student will be required to leave the program.

Thesis

The final requirement of each Ph.D. program is a Ph.D. thesis, which must be defended in a public research seminar and in a meeting of the research advisory committee. See specifics for each program below for additional requirements in certain programs and for Master degree requirements.

Other Provisions

All students enrolled in a Ph.D. program in the Department of Biology will be required to serve as associate instructors for at least one semester, regardless of their source of support; and they must complete formal instruction in teaching methods in order to enhance their teaching skills. It is the conviction of the department that teaching experience is a vital aspect of graduate education, whether or not the student intends to pursue a teaching career after attainment of the desired degree(s).

Biotechnology

Master of Science Degree

The department offers a program leading to a master's degree in Biotechnology for students who are interested in careers in the life science industry. This is a non-thesis, one-year program designed to give students advanced training in the underlying scientific principles of biotechnology and hands-on experience in many of the techniques used in the biotechnology sector.

Course Requirements

A total of 30 credit hours are required including a common core program consisting of the following courses: T500 (8 cr.), T501 (2 cr.), T502 (2 cr.), T508 (3 cr.), T515 (3 cr.), B501 (3 cr.), T521 (2 cr.), Z620 Biotechnology Writing (1 cr.). The remaining credit hours can be selected from an approved list of courses in Biology, Biochemistry, Bioinformatics, Business, Chemistry, Law, Statistics, or Medical Sciences.

Thesis

No thesis is required.

Ecology and Evolutionary Biology

Master of Arts Degree

Course Requirements

A total of 30 credit hours, of which at least 20 credit hours must be taken in approved ecology and evolutionary biology courses. The courses that each student takes must have a coherent focus within the general field of ecology and evolutionary biology. At least one seminar should be taken each year.

Thesis

Normally required; an alternative project may, however, be approved by the student's advisory committee.

Final Examination

Normally includes a public research seminar and an oral defense of the thesis or alternative project before the advisory committee.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including two courses from one concentration area listed below and one course from a second area, Z620 Biostatistics (or equivalent), and dissertation. Students must enroll in a seminar at least one semester during each of the first three years in the program.

Concentration Area Requirements

Ecology/Population Biology

- E455 (SPEA) Limnology
- L575 Biodiversity and Ecosystem Functioning
- L577 Theoretical Ecology
- L578 Advanced Population Biology
- L579 Community Ecology
- L591 Plant Population Biology—An Experimental Approach

Evolutionary Biology

- B555 Special Topics in Plant Systematics
- L505 Molecular Biology of Evolution
- L533 Evolution of Genes and Genomes
- L567 Evolution
- Z540 Genetics of Populations
- Z620 Molecular Evolutionary Genetics

Behavior/Physiology

- L560 Physiological Ecology
- L581 Behavioral Ecology
- P548 Neuroethology
- Z460 Ethology
- Z566 Laboratory in Endocrinology

Minor

The minor may be in a separate department, an interdepartmental program, a different graduate program in the Department of Biology, or in biometrics. Requirements are as set by the unit administering the minor.

Thesis

Students write a thesis based on scientific research.

Final Examination

Public research seminar and oral defense of the dissertation before the student's research committee.

Genetics

Molecular, Cellular, and Developmental Biology

Doctor of Philosophy Degree

Programs leading to the Ph.D. degrees in genetics, and in molecular, cellular, and developmental biology, are administered by the Faculty Committee on Molecular Biology and Genetics (MBG), in collaboration with members of the Department of Chemistry. The Ph.D. in plant sciences can be pursued under the supervision of MBG or that of ecology and evolutionary biology, depending upon the nature of a student's research interests.

Course Requirements

During the first year, students takes a common core program of courses and conduct research projects in at least three different laboratories prior to selecting a permanent research advisor and laboratory. Students must complete a total of 90 credit hours including the core program, two advanced courses (see below), Grant Writing (Z620), Journal Club (M850 or Z620), and Research Ethics and Careers (Z620). Grant Writing and Journal Club are taken during year two, and Research Ethics and Careers during year three. Students must teach for at least one semester.

Minor

Each student must select a minor field distinct from the chosen degree. Ordinarily, the core program courses meet minor requirements. In some cases a student may select another minor and must meet any additional requirements set by that minor.

Thesis

Students write a thesis based on scientific research.

Final Examination

Public research seminar and oral defense of the dissertation before the student's research committee.

Microbiology

Degree programs are available for students with interests in many areas of microbiology. Each student's curriculum is designed by the student in consultation with the graduate program director, the student's mentor, and an appointed advisory committee.

Master of Arts Degree with a Research Thesis

Course Requirements

A total of 30 credit hours; 12 of these must be course work not including M500, M800, or M850. Course options include B501 (4.5 cr.), L585 (4.5 cr.), C483, C485, M416, M430, M460, M480, M525, M540, L586, Z620 (Special Topics, 1.5-3 cr.). Students are expected to rotate (M500) in at least two laboratories during the fall semester and to participate in M850 Microbiology Journal Club each time it is offered in the fall and spring.

Thesis

Required.

Final Examination

Oral defense of thesis.

Master of Arts Degree with a Library Thesis

The department also offers a program in microbiology leading to a terminal master's degree that does not require a laboratory research project. A student enrolled in this program will write a thesis critically evaluating and reviewing some aspect of microbiology reported in the literature. All other requirements for the degree are identical to those stated above for the research-thesis Master of Arts. The degree is designed to give individuals an opportunity to pursue graduate study at the master's level without acquiring expertise in laboratory research.

Doctor of Philosophy Degree
Course Requirements

A total of 90 credit hours, including the following core courses: L585 (4.5 cr.), B501 (4.5 cr.), L523, and M500. C483 and C484 may be substituted for the core B501. Two advanced topics courses are also required. Electives include but are not limited to M430, M525, L572, L586, Z620 (Special Topics). Additional courses from this or other departments with written permission of the microbiology program director may be substituted for the electives. Also required are M850 (Microbiology Journal Club), taken each fall and spring (except for the first semester), Grant Writing (Z620), and Research Ethics and Careers (Z620). During the first year, students are required to complete three rotations (M500). Students must teach for at least one semester.

Thesis

Students write a thesis based on scientific research.

Final Examination

Public research seminar and oral defense of the dissertation before the student's research committee.

Plant Sciences
Master of Arts Degree
Course Requirements

A total of 30 credit hours, stressing suitable advanced courses in plant sciences and cognate areas. At least 20 of the credit hours must be in the major area.

Thesis

Required. An equivalent creative project may be accepted in lieu of the thesis.

Final Examination

Normally includes a public research seminar and an oral defense of the thesis or alternative project before the advisory committee.

Doctor of Philosophy Degree
Ph.D. students choosing a molecular approach will follow the procedures of the genetics and molecular, cellular, and developmental biology graduate programs. Likewise, students choosing an organismal approach will follow the procedures of the evolution, ecology and behavior program.

Zoology
Each degree program is tailored to the specific interests and needs of the student.

Master of Arts Degree
Course Requirements

A total of 30 credit hours, of which at least 20 credit hours must be taken in the Department of Biology.

Thesis

Required. An alternative project may be accepted in lieu of the thesis.

Doctor of Philosophy Degree
Course Requirements

A total of 90 credit hours of advanced course work, including dissertation.

Minor
Selected in consultation with research advisor and zoology program director.

Master of Arts for Teachers Degree
The Master of Arts for Teachers in biology is offered by the University Graduate School (not the School of Education) to provide training beyond the bachelor's degree for those who intend to teach in junior or senior high school and who wish additional training in biology. Each student in the program must possess a teacher's certificate by the time the degree is conferred, with the exception of international students who intend to return to their native country.

Admission Requirements

Bachelor's degree from a regionally accredited institution with sufficient hours in biology to enable the student to take courses carrying graduate credit.

Course Requirements

A total of 36 credit hours, of which a minimum of 25 credit hours must be in courses in the biological sciences that carry graduate credit; the remaining 11 credit hours may be in education. All programs of study must be approved by the Master of Arts for Teachers program advisor.

Certification Requirements

For a complete list of courses in education and other areas that are required for provisional certification, consult the School of Education Undergraduate Program Bulletin.

Faculty

Chairperson

Professor Roger Innes*

Graduate Faculty
(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Clyde Culbertson Professor

Yves V. Brun*

Carlos Miller Professor

Craig Pikaard*

Distinguished Professors

Howard Gest* (Emeritus), Thomas C. Kaufman*, Ellen D. Ketterson*, Michael Lynch*, Jeffrey D. Palmer*, John Preer* (Emeritus), Rudolf A. Raff*, Michael Wade*

Professors

James Bever*, James José Bonner*, Yves V. Brun*, Peter T. Cherbas*, Keith Clay*, Lynda F. Delph*, Thomas F. Donahue*, Patricia L. Foster*, Clay Fuqua*, Roger P. Hangarter*, George Hegeman* (Emeritus), Roger Innes*, Arthur Koch* (Emeritus), Curtis M. Lively*, Paul Mahlberg* (Emeritus), Emilia Martins*, Carlos Miller*

(Emeritus), Elizabeth C. Raff*, Loren H. Rieseberg*, Albert W. Ruesink*, (Emeritus), Milton W. Taylor* (Emeritus), Robert Togasaki* (Emeritus), Maxine A. Watson*, David White* (Emeritus), Malcolm E. Winkler*, Miriam E. Zolan*

Associate Professors

Alan D. Bender*, Brian R. Calvi*, Gregory E. Demas*, James L. Goodson*, Matthew Hahn*, Richard Hardy*, George Hudock* (Emeritus), David M. Kehoe*, Justin P. Kumar*, Scott Michaels*, Armin P. Moczek*, Yean Chooi Odle*, Heather L. Reynolds*, G. Troy Smith*, Stefan J. Surzycki*, Michael R. Tansey*, Gregory J. Velicer*

Associate Professor, untenured

Kyung-Tai Min*

Assistant Professors

Justen Andrews*, Pranav Danthi*, Spencer R. Hall*, Ke Hu*, Laura M. Hurley*, Daniel B. Kearns*, Soni Lacefield*, Melanie M. Marketon*, Kristi Montooth*, Leonie Moyle*, Tuli Mukhopadhyay*, David E. Nelson*, Richard P. Phillips*, Joseph R. Pomerening*, Sidney L. Shaw*, Nicholas Sokol*, Andrew Zelhof*

Senior Scientists

Lucy Cherbas, Kevin R. Cook, Kathy Matthews

Associate Scientists

John K. Colbourne, Marcy A. Kingsbury, Eric Knox, Yuen-Tsu Nicco Yu

Assistant Scientists

Kristin Klueg, Ellen Popodi, James Powers, Peggy Schultz, Barry D. Stein, Danielle Whittaker

Adjunct Professors

Carl Bauer* (Biochemistry), Richard DiMarchi* (Chemistry), James Glazier* (Physics), Cheng C. Kao* (Biochemistry), Elisabeth Lloyd* (History and Philosophy of Science), Anton Neff* (Emeritus, Medical Sciences), J.C. Randolph (Public and Environmental Affairs), Roderick Suthers* (Psychology), William Timberlake* (Psychology), Nicholas Toth* (Anthropology), Meredith West* (Psychology) Ted Widlanski* (Chemistry), Adam Zlotnick* (Biochemistry)

Adjunct Associate Professors

Lingling Chen* (Biochemistry), David Daleke* (Medical Sciences), James T. Drummond* (Biochemistry), Vicki Meretsky* (Public and Environmental Affairs), Martha Oakley* (Chemistry), Flynn Picardal* (Public and Environmental Affairs), Henry Prange* (Emeritus, Medical Sciences)

Adjunct Assistant Professor

Thomas Tolbert* (Chemistry)

Director of Graduate Studies

Professor Roger P. Hangarter*, Myers Hall 352, (812) 855-5456

Courses

BIOL–B 351 Fungi (3 cr.)

BIOL–B 352 Fungi: Laboratory (2 cr.)

BIOL–B 364 Summer Flowering Plants (4–5 cr.)

BIOL–B 368 Ethnobotany (3 cr.)

BIOL–B 371 Ecological Plant Physiology (3 cr.)

BIOL–B 372 Ecological Plant Physiology Laboratory (2 cr.) This course is not currently being offered.

BIOL–B 373 Mechanisms of Plant Development (4 cr.) This course is not currently being offered.

BIOL–B 415 Phytogeography (2 cr.) This course is not currently being offered.

BIOL–B 423 Introduction to Paleobotany (3 cr.) This course is not currently being offered.

BIOL–B 445 Experimental Molecular and Cellular Biology of Eukaryotes (4 cr.)

BIOL–B 530 Anatomy and Morphology Seminar (arr. cr.) P: Consent of instructor. Seminars will include current research studies in plant anatomy and morphology. This course is not currently being offered.

BIOL–B 555 Special Topics in Plant Systematics (3 cr.) Topics vary from year to year. Examples of subjects to be treated: phylogeny and families of flowering plants, biology of ferns, biosystematics, molecular markers in populational biology, and systematics. Enrollment of advanced undergraduates encouraged.

BIOL–B 560 Seminar in Systematics (arr. cr.) P: Consent of instructor. Topics vary each semester.

BIOL–B 570 Seminar in Physiology and Molecular Biology of Plants (arr. cr.) P: Consent of instructor. This course is not currently being offered.

BIOL–B 572 Photobiology (3 cr.) P: S305 or L367 or CHEM C483 or equivalent. Biochemical and biophysical relationship between light and biological systems. Topics will include photosynthesis, visual processes, photorespiration, phototaxis, bioluminescence, and photomorphogenesis, with emphasis on photosynthesis.

BIOL–B 573 Special Topics in Plant Physiology (2–5 cr.) P: Consent of instructor. Advanced topics in plant physiology. This course is not currently being offered.

BIOL–B 576 Developmental Plant Physiology (3 cr.) P: Consent of instructor. Chemically oriented; examination of substances uniquely involved in growth and development in higher plants. Application of information to lower plants only briefly discussed. This course is not currently being offered.

BIOL–B 577 Plant Biochemistry (2 cr.) A comparative treatment of selected biochemical topics, emphasizing unique or important processes in plant metabolism and development. This course is not currently being offered.

BIOL–L 313 Cell Biology Laboratory (3 cr.) P: BIOL L113 and L211, or CHEM C342, or consent of instructor. R: BIOL L312, CHEM C484.

BIOL–L 417 Molecular Aspects of Development (3 cr.) This course is not currently being offered.

BIOL–L 465 Advanced Field Biology (3 cr.)

BIOL–L 473 Ecology (3 cr.)

BIOL–L 474 Field and Laboratory Ecology (2 cr.)

BIOL–L 479 Evolution and Ecology (4 cr.) This course is not currently being offered.

BIOL–L 500 Independent Study (arr. cr.) P: Written consent of faculty member supervising research.

BIOL–L 501 Independent Study (1–6 cr.) P: Written consent of faculty member supervising work. Supervised work. S/F grading.

BIOL–L 504 Genome Biology for Physical Scientists (3 cr.) An accelerated but introductory treatment of contemporary issues in molecular biology and genetics including genome structures, gene function and regulation, mapping, proteins, and molecular evolution. Intended to meet the needs of graduate students in mathematics, physics, chemistry, computer sciences, and informatics who are considering working in biological areas or collaborating with biologists.

BIOL–L 505 Evolution of Development (3 cr.) P: Senior or graduate standing and consent of instructor. An integrative approach to the link between development and the evolution of morphology. Topics: evolution of developmental mechanisms and of developmental regulatory genes, production of evolutionary changes through changes in developmental processes, developmental constraints, and origins of major body plans.

BIOL–L 509 Field Exercises for Biology Education (1–5 cr.) L509 is a graduate course for students in biology and education with an intended career in biology education. Credits are variable (1-5) and will be arranged. Students will design field exercises based at the Indiana University Research and Teaching Preserve on topics in organismal biology and ecology appropriate for public school and other outside groups.

BIOL–L 510 Introduction to the Research Laboratory (3 cr.) P: Graduate standing. Objectives and techniques of biological research. Completion of a one-semester research problem with a faculty member.

BIOL–L 519 Bioinformatics: Theory and Application (3 cr.) Overview of theory and applications in bioinformatics, based on fundamentals of molecular biology and information sciences. Common problems, data, and tools in the field are outlined. These include biosequence analysis, alignment and assembly, genomics, proteomics and phylogenetics, biological databases and data mining, and Internet bio-information services.

BIOL–L 520 Seminar in Genetics (arr. cr.) P: L364 or Z420 or equivalents. This course is not currently being offered.

BIOL–L 521 Problems in Genetics—Higher Organisms (3 cr.) P: L364 or equivalent. Selected topics in the genetics of higher organisms emphasizing studies at the molecular level. This course is not currently being offered.

BIOL–L 522 Advanced Eukaryotic Molecular Genetics (3 cr.) P: Consent of instructor; beginning course in genetics. Correlation of genetic data with changes in chromosome structure and number. Mechanics of chromosome behavior in crossing over and disjunction. This course is not currently being offered.

BIOL–L 523 Critical Analysis of the Scientific Literature (1–6 cr.) Detailed analysis of current research papers in biology. Emphasis on experimental design, research methods, interpretation of results, and suitability of controls. Generally taken in the first semester of graduate residence. Topics may vary to suit specific fields (e.g., molecular, cellular, and developmental biology and genetics, or ecological and evolutionary biology).

BIOL–L 529 Bioinformatics in Molecular Biology and Genetics: Practical Applications (4 cr.) P: I501, I502, L519, or consent of instructor. Practical experience in a range of data analysis and software engineering methods applied to molecular biology data.

BIOL–L 533 Evolution of Genes and Genomes (3 cr.) Provides a broad conceptual overview of issues in molecular and genomic evolution, with an emphasis on population-genetic issues.

BIOL–L 555 Alternative Approaches to Teaching College Biology (2 cr.) Frameworks for teaching college biology. Addresses different teaching objectives (knowledge, applications, scientific thinking, ethical and policy considerations); different teaching methods (lectures, readings, recitations, discussions, exercises, experiments, projects); student heterogeneity (expectations, abilities, development, learning styles); evaluation and grading; course and curriculum design; and evaluation and improvement of teaching.

BIOL–L 560 Physiological Ecology (3 cr.) Influence of the abiotic environment on energy and material transfers in individual organisms, with emphasis on terrestrial animals.

BIOL–L 567 Evolution (3 cr.) P: Graduate standing in psychology or biology or consent of the instructor. Topics include quantitative genetics, population genetics, and strategic models of natural selection. Special topics include: life history theory, sex and sexual selection, kin selection, shifting-balance theory, speciation, macroevolution, and comparative methods.

BIOL–L 570 Seminar in Ecology and Environmental Biology (1 cr.) P: Consent of instructor. Presentations and discussions of current research in Evolution, Ecology, and Behavior.

BIOL–L 572 Microbial Ecology (3 cr.) Principles of microbial ecology with emphasis on the population, community, and ecosystem ecology of bacteria and fungi.

BIOL–L 573 Quantitative Genetics and Microevolution (1.5–3 cr.) Explores the fundamentals of the quantitative genetic approach to understanding evolutionary process. Topics include the conceptualization and measurement of selection and the response to selection, the measurement and consequences of genetic architecture, as well as application of these ideas to classical and modern evolutionary theory.

BIOL–L 575 Ecosystem Structure and Function (3 cr.) P: L473 and L474 (or equivalent) or instructor's consent. Does biodiversity matter? Analysis of relationships between biodiversity and ecosystem functioning. Emphasis on current literature, including theoretical and empirical work. Lectures will alternate with class discussion and debate.

BIOL–L 577 Theoretical Ecology (3 cr.) Empowers students to develop and analyze ecology-based models and use them as statistical hypotheses. Topics include nonlinear one- and multi-species dynamics; stability analysis; bifurcations; maximum likelihood; model competition and information criteria.

BIOL–L 578 Advanced Population Biology (3 cr.) P: Courses in ecology, genetics, and basic calculus, and permission of instructor. A detailed assessment of population-ecological and population-genetic theory, and the factors determining the size and composition of animal populations in nature.

BIOL–L 579 Community Ecology (3 cr.) P: Ecology and genetics. Survey of ecological and evolutionary topics between population and ecosystem levels. Review of scientific levels of selection and speciation. Major emphasis on interactions among populations (consumer-producer, competition, symbiosis, etc.) and community analysis (island biogeography, niche, diversity, and community structure).

BIOL–L 580 Introduction to Research (1 cr.) Individual faculty from the various graduate programs in biology present seminars on their research programs. Discussion between students and faculty about possible thesis research projects is encouraged.

BIOL–L 581 Behavioral Ecology (3 cr.) Integrated elements of ethology, physiology, ecology, and evolutionary biology providing a synthetic approach to animal behavior. Emphasis on integrated studies providing new insights into both evolutionary and mechanistic questions. Students are asked to analyze the literature critically and debate controversial issues actively.

BIOL–L 585 Genetics and Bioinformatics (3–4.5 cr.) Focuses on genome organization and transmission and molecular genetics in a number of prokaryotic and eukaryotic systems. Topics include molecular mechanisms of mutation, suppression, replication, meiosis, recombination, complementation, and approaches to identifying and analyzing genes. Introduces students to the use of databases, programs for computational analysis of DNA and protein sequence data, and high-throughput methods in genomics and proteomics.

BIOL–L 586 Cell Biology (3–4.5 cr.) Critical analysis of recent advances in our understanding of molecular organization and function of cellular structures. The emphasis of this course will be on eukaryotic cells. Topics include membrane organization, cytoskeleton assembly and functions, signal transduction, cell-cycle regulation, protein sorting, and vesicle trafficking.

BIOL–L 587 Developmental Biology (3–4.5 cr.) Evaluation of classical and current molecular and genetic approaches to studying development of eukaryotic organisms. A significant portion of the course is devoted to discussing recent findings from molecular genetic studies in Drosophila and C. elegans.

BIOL–L 590 Seminar in Molecular, Cellular, and Developmental Biology (2 cr.) P: Consent of instructor. Presentation and discussion of topics in molecular and cellular biology as seminar by students. Topics from current literature. Concentration on a particular area each semester to be announced before registration. S/F grading. This course is not currently being offered.

BIOL–L 591 Plant Population Biology—An Experimental Approach (3 cr.) P: Ecology course and evolution course. The mechanisms by which plants, as individuals, contribute to development of population structure. Experimental studies of intra- and inter-specific mechanisms of population regulation, reproduction, and vegetative growth. Emphasis on development and physiological characteristics which determine mode of interaction. Greenhouse projects designed and conducted by students.

BIOL–L 600 Special Topics in Genetics (arr. cr.) P: L364 or equivalent. Topics not extensively treated in other courses, e.g., population genetics, human genetics, immunogenetics, biochemical genetics of clones of mammalian cells. Topic presented will not be duplicated within three to five years. L600 carries credit in plant sciences, microbiology, and zoology programs. This course is not currently being offered.

BIOL–L 800 Research (1–15 cr.)

BIOL–M 300 Biomedical Sciences Documentation (1 cr.)

BIOL–M 310 Microbiology (3 cr.) This course is not currently being offered.

BIOL–M 315 Microbiology Laboratory (2 cr.) This course is not currently being offered.

BIOL–M 430 Virology: Lecture (3 cr.)

BIOL–M 435 Viral-Tissue-Culture Laboratory (3 cr.) P: or C: M430, or consent of instructor.

BIOL–M 440 Medical Microbiology: Lecture (3 cr.) P: BIOL L211. R: BIOL M250, M255.

BIOL–M 460 Biology of the Prokaryotes (3 cr.)

BIOL–M 465 Biology of the Prokaryotes: Laboratory (3 cr.)

BIOL–M 480 Microbial and Molecular Genetics (3 cr.)

BIOL–M 485 Microbial and Molecular Genetics Laboratory (3 cr.)

BIOL–M 500 Introduction to Research (Microbiology) (1–6 cr.) P: Graduate standing. Objectives and techniques of microbiological research. Assignment to a research problem with a faculty member to be completed in two semesters.

BIOL–M 511 Molecular Biology of Prokaryotes (3 cr.) P: CHEM C584. The course will first develop an understanding of nucleic acid structure and function to a professional level, then use these principles to explore molecular aspects of gene expression and evolution. Emphasis will be on prokaryotes.

BIOL–M 512 Molecular Biology of AIDS Virus (3 cr.) P: CHEM C341 and BIOL L311. A detailed consideration of the human immunodeficiency virus (HIV, causative agent of AIDS). The functions of the HIV genes and how those functions affect pathology and normal cellular mechanisms.

BIOL–M 525 Topics in Microbial Biochemistry and Physiology (3 cr.) P: Graduate standing and C483 or M350 or equivalent. The course will consider topics in physiology and biochemistry of eukaryotic and prokaryotic microorganisms. Subjects include membrane physiology and regulatory networks in metabolism and gene expression.

BIOL–M 540 Medical Microbiology and Medical Immunology (2–5 cr.) Basic concepts of immunology; microorganisms as agents of disease, host-parasite relationships, epidemiology, chemotherapy.

BIOL–M 545 Medical Microbiology Laboratory (1 cr.) P: M540. Laboratory experiments to illustrate material discussed in M540.

BIOL–M 550 Microbiology (3 cr.) P: Two semesters of college chemistry; L211 recommended prior or concurrently. Application of fundamental principles to the study of microorganisms. Significance of microorganisms to humans and their environment. Critical evaluation of current microbiological literature.

BIOL–M 575 Human Parasitology (4 cr.) P: BIOL M310 and M315. Biology of human parasites focusing on their etiology, epidemiology, immunology, diagnosis, and treatment. Major groups of protozoa, helminths, and medically important arthropods covered. Independent research assigned on a special topic. Lab presents both live and fixed materials complementing lecture.

BIOL–M 610 Recent Advances in Microbiology (1–3 cr.) P: Graduate standing in microbiology or related area. Course content changes each semester so that over a cycle of several years, major research areas are covered.

BIOL–M 612 Microbial Development (3 cr.) P: Graduate standing or consent of instructor. An analysis of recent publications concerned with the biochemistry of development in viral, prokaryotic, and simple eukaryotic systems. The topics vary and emphasize the regulatory aspects of development. Cell differentiation and cell-cell interactions are discussed. This course is not currently being offered.

BIOL–M 800 Research (1–12 cr.)

BIOL–M 850 Seminar (1 cr.) P: Graduate standing in microbiology or consent of instructor. Reports on assigned topics of current interest. S/F grading.

BIOL–T 500 Project Laboratory in Biotechnology (1–3 cr.) Students explore the different stages of scientific investigation by performing research using the techniques of biochemistry, molecular biology, genetics, and cell biology on problems related to biotechnology. Students design and execute research projects under supervision of the instructor in a teaching laboratory setting on problems chosen in consultation with the instructor.

BIOL–T 501 Topics in Biotechnology I (2 cr.) Students read and analyze research articles from the current literature and present the articles in a journal club format. Students will practice their presentation with the instructor prior to presenting to the group and will receive feedback on the content and the presentation style. Guest lecturers from industry are invited to present on a wide range of topics relevant to biotechnology.

BIOL–T 502 Topics in Biotechnology II (2 cr.) Follows from BIOL T501. Students read and analyze research articles from the current literature and present the articles in a journal club format. Articles can cover any area of biotechnology or any area relevant to biotechnology. Occasionally, invited guest lecturers from industry are invited to present on a wide range of topics relevant to biotechnology.

BIOL–T 508 Theory and Applications of Biotechnology Lecture I (3 cr.) Advanced, graduate-level course focused on the applications of molecular genetics and recombinant DNA in biotechnology. Fundamental concepts of relevant molecular biology and biochemistry will be covered in depth in the first portion of the class, followed by sections on recombinant DNA technology, macromolecular purification, and genomics/bioinformatics

BIOL–T 509 Theory and Application of Biotechnology Lecture II (3 cr.) Course continues from BIOL T510. Focuses on applications of biotechnology, including genetic engineering of plants and animals, bioremediation, biopharmaceutical production, vaccine development, and molecular diagnostics. Bioengineering principles of fermentation, scale-up, and high-throughput functional screening will be an important component of this material.

BIOL–T 515 Theory and Applications of Biotechnology Laboratory I (3 cr.) Students will learn advanced laboratory techniques currently used in biotechnology. Course is designed to cover advanced techniques at a deep level. As far as possible the laboratory exercises will be coordinated with BIOL T510 Theory and Applications of Biotechnology Lecture I. There will be two modules, one emphasizing cell biology and one emphasizing molecular biology.

BIOL–T 516 Theory and Applications of Biotechnology Laboratory II (3 cr.) Continues from BIOL T515. As far as possible the laboratory exercises will be coordinated with BIOL T511 Theory and Applications of Biotechnology Lecture II. There will be two modules, one emphasizing cell biology and one emphasizing molecular biology.

BIOL–T 521 Research Design and Ethics (2 cr.) Fundamentals of research protocol design and planning with applications to practical problems. Problems of research ethics and the role of biotechnology in human society will be addressed in class discussion and seminars.

BIOL–Z 373 Entomology (3 cr.)

BIOL–Z 374 Invertebrate Zoology (3 cr.)

BIOL–Z 406 Vertebrate Zoology (5 cr.)

BIOL–Z 420 Cytology (3 cr.) This course is not currently being offered.

BIOL–Z 460 Ethology (3 cr.)

BIOL–Z 466 Endocrinology (3 cr.)

BIOL–Z 476 Biology of Fishes (3 cr.)

BIOL–Z 486 Standards and Techniques of Animal Experimentation (2 cr.) This course is not currently being offered.

BIOL–Z 508 Advanced Ornithology (4 cr.) P: Z406. Emphasis on avian ecology, distribution, and behavior; discussion and evaluation of recent literature. Field work includes investigation of populations of a wintering species and a breeding species. This course is not currently being offered.

BIOL–Z 540 Genetics of Populations (4 cr.) P: Consent of instructor. R: Z465, MATH M216, or equivalent. Survey of the theoretical basis of population genetics and a review of current problems and experimental findings. Content varies from year to year.

BIOL–Z 566 Laboratory in Endocrinology (2 cr.) P: Z466. Development and structure of major endocrine glands; their role in maintaining constancy of internal environment. Limited to 12 students. This course is not currently being offered.

BIOL–Z 576 Invertebrate Zoology Laboratory (2 cr.) P: P or C: Z374. Laboratory and field studies of invertebrates, with an emphasis on experiments with living specimens.

BIOL–Z 620 Special Topics in Zoology (arr. cr.) P: Advanced undergraduate or graduate standing. Topics not extensively treated in other courses, e.g., theoretical zoology, oceanography, reservoir limnology, human ecology, biochemistry, viruses and disease, critical analysis of the scientific literature, and other fields. Topics presented will be treated every three to five years.

Business

Kelley School of Business

Departmental E-mail: ksbdoc@indiana.edu

Departmental URL: http://www.kelley.iu.edu/doctoral/

Curriculum

Degrees Offered

Doctor of Philosophy. In addition, the Kelley School of Business offers the Master of Business Administration, Master of Science in Information Systems, Master of Professional Accountancy, and the Doctor of Business Administration. For details, see the Kelley School of Business Bulletin, Graduate Programs.

Special School Requirements

(See also general University Graduate School requirements.)

Admission

To apply for admission to the doctoral programs in business, the applicant must do the following:

1. For domestic and international applications: apply online at app.applyyourself.com/?id=IU-BLA.
2. Arrange for at least three letters of recommendation to be sent from persons qualified to judge the academic potential of the applicant.
3. Arrange to take (or have already taken within four years of the date of application) either the Graduate Management Admission Test or the Graduate Record Examination General Test. These tests are prepared by the Educational Testing Service and are administered at numerous locations throughout the United States approximately four times each year and, at less frequent intervals, in many foreign countries.
4. For domestic applications: submit official transcripts of all college work taken and other support material directly to the Chairperson of the Doctoral Programs, Kelley School of Business, 1309 E. Tenth Street, Indiana University, Bloomington, IN 47405-1701.
5. For international applications: submit official transcripts of all college work taken and other support material directly to the Office of International Admissions, 300 N. Jordan Avenue, Indiana University, Bloomington, IN 47405.

Detailed information on admission and financial aid as well as additional program data may be obtained from the doctoral programs office. The application deadline for August admission is the preceding January 15 (December 1 for international students).

Early applications are urged since all spaces in particular departments may be filled before the deadline. Late applications will be honored only if space is available.

Admission to the doctoral program in business is based on an individual's qualifications as evidenced by the application, official transcripts, scores on the Graduate Management Admission Test or the Graduate Record Examination, and, if possible, a personal interview. Prospective students' applications for admission and supporting credentials are reviewed by the doctoral program's administrative committee and by the faculty in the proposed major department.
While it is unusual, highly qualified students with career objectives clearly in mind may enter the doctoral programs in business directly from a baccalaureate program with the intention of working toward a doctoral degree. Most, however, will begin work toward the doctorate after obtaining the master's degree.

Doctor of Philosophy Degree

Program Requirements

The requirements for the Ph.D. program in business are fulfilled in three basic phases of study. Although these phases may overlap, the program requires a logical sequence of course work, qualifying examinations, and dissertation research.

Phase I

The Phase I requirements entail no minimum number of credit hours but focus instead on proficiency in business operations and the basic disciplines. The credit hours required for proficiency may be met either by exemption (through the acceptance of previous course work) or by taking courses or independent study after entering the program. Individual departments determine the appropriate requirements for their majors.

Teaching Development Program

All candidates for a doctoral degree in business must complete the 1.5 semester hour teaching development seminar or its equivalent. This seminar provides a grounding in learning and teaching styles and methods.

Phase II

The Phase II program of study is the central part of the student's doctoral-level course work. It is therefore critical that the courses be selected to achieve the student's educational objectives while emphasizing high levels of research and scholarship.

Major Field

The program of study for the major is planned in consultation with the student's major-field advisor and consists of a minimum of 18 credit hours of advanced graduate work. There is no intention that the entire program of study relating to the major must be taken in the administrative department or area represented by that major field. On the contrary, students are encouraged to incorporate courses from other departments or areas into their major-field curriculum when such courses are closely related to the individual's interests and help form a logical whole.

Minor Field

Each student selects one minor field, which requires a minimum of 9 credit hours of work beyond that expected as minimal preparation for all doctoral students. Minors are available in each of the major fields, as well as in the following fields (though not limited to these): international business, economics, political science, history, mathematics, psychology, sociology, and law. The doctoral business minor provides the opportunity for the integration of other disciplines into the major area(s) of students majoring in the Kelley School of Business; it requires a minimum of 9 credit hours from a field outside the student's major field. The minor requirements for fields outside the Kelley School of Business are determined by the department in which the minor is offered. An overall GPA of at least 3.4 in the three courses is required.

Methodology and Analysis (M and A) Requirement

All doctoral candidates must demonstrate competency in the areas of research methodology and statistical analysis. This is a 9 credit hour requirement. This course work will help provide the foundation and special proficiency in research design and analysis necessary for candidates to conduct their research programs.

Double Major Option

Rather than follow the major, minor, and M and A sequence, a doctoral student may elect to have two majors. The double major candidate has the option of (1) two majors, each with 18 credit hours, or (2) a first major with 21 credit hours plus a second major of at least 15 credit hours. There are two issues that a student electing a double major should consider. First, all double majors must pass the qualifying examination in both majors. Second, a double major is unlikely to be approved unless the student can demonstrate that a portion of the overall course work provides competency in M and A. Doctoral students may not unilaterally elect to have a double major; the student's petition for a double major must be approved by both departments as well as by the chairperson of doctoral programs.

Grades

Course grades below C+ (2.3) are not counted toward degree requirements but will be included in the computation of the student's grade point average. At least a 3.4 grade point average with no grade below B– (2.7) is required in those courses taken as part of the minor field. Students must achieve an overall grade point average of at least 3.3 and earn no less than a B– (2.7) in those courses taken as part of the methodology area.

Examinations

Evidence of the student's competence in a major field must be demonstrated by examination. Examinations may also be required in some minor fields. The examinations are designed as exercises in creative and critical thinking, not merely in recollecting facts and familiar analyses.

Admission to Candidacy

Upon successful completion of all Phase II requirements (including all qualifying examinations), the student will be nominated to candidacy.

Dissertation Proposal

Examination on the dissertation proposal usually comes at the close of the work in Phase II of the program. A research committee is appointed to supervise and assist each candidate. A formal oral examination, to which other doctoral students and faculty members are invited, is held on the proposal. Upon passing the examination, the candidate moves into the third phase of the program.

Phase III

Dissertation

An important early part of the dissertation experience is integrated with the advanced course work through the research seminars. A minimum of 24 credit hours of dissertation credit is required, but 3 hours of credit in research seminars within the major area may count toward this requirement. Since the dissertation represents a major research project, a year or more of full-time work in close cooperation with the candidate's committee is normally required to complete Phase III. For this reason, candidates in the Indiana University doctoral programs in business are strongly urged to remain in residence until all degree requirements have been met.

Defense of the Dissertation

Phase III concludes with the defense of the dissertation. The objective of the defense is to provide students with a forum for formal presentation of the results of their dissertation research. The purpose of the presentation, questioning, and discussion is to enable students to demonstrate that they have successfully completed what they set out to do, as stated at the time of the proposal defense. The dissertation defense gives the research committee a final opportunity to bring the candidate's research methods, findings, and conclusions under critical review. The candidate is expected to be able to defend all aspects of the inquiry satisfactorily.

For further information on the Doctor of Philosophy degree in business, consult the doctoral programs website: http://www.kelley.iu.edu/doctoral/.

Ph.D. Minor in Business

Students in other departments may minor in business by completing 9 credit hours of graduate work at the 600 level or above. A specialized minor field may be selected from

the major fields for business students; a nonspecialized minor consists of courses from different fields. In the Kelley School of Business, courses numbered 600 or above are doctoral seminars. Courses at the 500 level are M.B.A. courses. Permission is required from the M.B.A. program for non-M.B.A. students to enroll in these courses. Interested students should contact the doctoral programs office for further information about available fields and procedures to be followed.

Faculty

Dean

Daniel C. Smith*, The Clare W. Barker Chair in Marketing

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Franklin Acito*, S. Christian Albright*, Timothy T. Baldwin*, Michael R. Baye*, Messod-Daniel Beneish*, John A. Boquist*, Kurt Bretthauer*, Raymond R. Burke*, Philip L. Cochran*, Jeffrey G. Covin*, Anthony D. Cox*, Catherine M. Dalton*, Dan R. Dalton*, Lawrence S. Davidson*, Alan R. Dennis*, Marc J. Dollinger*, George F. Dreher*, Terry M. Dworkin* (Emerita), Jeffrey D. Fisher*, Joseph G. Fisher*, S. Michael Groomer* (Emeritus), John Hassell*, Stephen L. Hayford, W. Harvey Hegarty* (Emeritus), Lester E. Heitger* (Emeritus), George W. Hettenhouse* (Emeritus), John W. Hill*, Peggy A. Hite*, Thomas P. Hustad*, F. Robert Jacobs*, Bruce L. Jaffee*, Robert H. Jennings*, Heejoon Kang* (Emeritus), Idalene Kesner*, H. Shanker Krishnan*, Donald F. Kuratko, Arlen W. Langvardt, Glen A. Larsen*, R. Thomas Lenz*, Marjorie A. Lyles*, Vincent A. Mabert* (Emeritus), David B. MacKay* (Emeritus, Geography), Scott Bradley MacKenzie*, Laureen Ann Maines*, Jane P. Mallor*, Anne P. Massey*, John W. Maxwell*, Patricia P. McDougall*, Michael B. Metzger*, Dennis W. Organ* (Emeritus), Robert W. Parry, Jr.*, James H. Patterson* (Emeritus), Philip M. Podsakoff*, James H. Pratt*, Eric B. Rasmusen*, Eric L. Richards, Gerald L. Salamon* (Emeritus), William L. Sartoris* (Emeritus), Roger W. Schmenner*, Dean A. Shepherd*, Daniel C. Smith*, J. Reed Smith*, Robert E. Smith*, Ashok Kumar Soni*, Rosann Lee Spiro*, Geoffrey B. Sprinkle*, Jerrold J. Stern*, Charles Trzcinka*, Gregory F. Udell*, M. A. Venkataramanan*, James M. Wahlen*, Rockney Walters*, Jack R. Wentworth* (Emeritus), Bradley Charles Wheeler*, James C. Wimbush*, Wayne L. Winston*

Associate Professors

Utpal Bhattacharya*, J. Douglas Blocher*, Thomas Bowers, Kyle Cattani, Andrew Ellul, Laura Ginger, Randall A. Heron, Leslie D. Hodder, Craig W. Holden*, Patrick E. Hopkins, Eric N. Johnson*, Steven L. Jones*, Sreenivas Kamma*, Vijay Khatri*, William Kulsrud*, Julie M. Magid, Richard Magjuka*, Martin Arthur McCrory, Neil Morgan, Robert Neal*, Jamie Darin Prenkert, Richard Rogers, Todd Saxton, Richard L. Shockley Jr.*, Rebecca J. Slotegraaf, Mohan Tatikonda*, Mikel G. Tiller*, Ramesh Venkataraman*, Xiaoyun Yu

Assistant Professors

Nandini Gupta, Rick Harbaugh*, Hans S. Heese*, Xinxin Hu, Dan Li, Shibo Li*, Marc Peter Picconi, Andrey D. Ukhov, Jun Yang

Chairperson of the Doctoral Program

Professor Kurt M. Bretthauer*, Kelley School of Business, BU 730, (812) 855-3476

Central Eurasian Studies

College of Arts and Sciences

Departmental E-mail: http://wceus@indiana.edu

Departmental URL: www.indiana.edu/~ceus

Curriculum

Program Information

The department offers a comprehensive program on the study of Central Eurasia, the vast heartland of Europe and Asia. Students are introduced to the area as a whole and specialize in one of the major regions within Central Eurasia. The degree program consists of two interconnected elements: a language of specialization, which gives a student access to the culture of a given region through the voices of its people; and a region of specialization, which includes courses on various aspects of the region's culture. The language of specialization may be any language offered regularly in the department, including Estonian, Finnish, Hungarian, Kazakh, Mongolian, Pashto, Persian, Tibetan, Turkish, Uyghur, Uzbek, and other two-year department languages permitted by the student's Graduate Advisory Committee. Some regions and languages such as the Siberian region (including the Buryat, Evenki, Yakut, and other languages) and the Volga-Kama region (including the Mari, Mordvin, and other languages) are also available only as individualized specializations at the Ph.D. level.

Degrees Offered

Master of Arts and Doctor of Philosophy. CEUS also offers a dual M.A./M.P.A. degree with the School of Public and Environmental Affairs, a dual M.A./M.B.A. degree with the Kelley School of Business and dual M.A./M.I.S. and M.A./M.L.S. degrees with the School of Library and Information Sciences.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

The degree requirements are subdivided into fields based on the region of specialization: the Baltic-Finnish region (with primarily Estonian or Finnish as language of specialization), the Central Asian region (including Xinjiang, with primarily Uzbek, Kazakh, or Uyghur as language of specialization), the Hungarian region (with Hungarian as language of specialization), the Iranian region (with Persian as language of specialization), the Mongolian region (with primarily Mongolian as language of specialization), Post-Communism and Nationalism (with a language of specialization chosen in consultation with the student's Graduate Advisory Committee; Russian may be an option), the Tibetan region (with Tibetan as language

of specialization), and the Turkish region (with Turkish as language of specialization).

Admission Requirements

All M.A. applicants must have achieved a minimum of a 3.0 (B) grade point average (GPA) for the B.A. course work. The undergraduate record must show at least two years of any single foreign language at the college level or the equivalent. Three letters of recommendation and a statement of purpose are required. International applicants must have a score of 550 or better for the paper-based TOEFL exam, or 213 or better for the computer-based exam. U.S. students need an appropriate level of achievement on the Graduate Record Examination General Test.

Course Requirements

A total of 30 credit hours: 3 credit hours of a professional research methodology course; intermediate (second-year) level of a language of specialization taught in the department (6 hours); 12 credit hours of courses in the region of specialization; 6 credit hours of electives, at least 3 of which must be taken in the department; and R691, the M.A. thesis course (3 credit hours). The exact program for each student, based on departmental offerings, is established by the student's Graduate Advisory Committee.

Research Language Requirement

Reading proficiency in one of the following: French, German, Russian. Substitutions, when justified by the student's field of specialization, may be permitted by the student's Graduate Advisory Committee.

Thesis

Required. M.A. thesis should be no fewer than 50 and not more than 70 double-spaced pages (text and notes) and reflect the use of materials in the student's language of specialization or in at least one research language other than English. Thesis requirement can be waived if an M.A. thesis was written for an earlier M.A. degree. The student shall normally submit the M.A. thesis within 90 days after the end of the fifth semester of full-time enrollment. Extensions may be granted only with the written permission of the student's Graduate Advisory Committee and the chairperson of the department.

Dual Master of Arts in Central Eurasian Studies and Master of Public Affairs (M.A./M.P.A.) Degree.

The Department of Central Eurasian Studies and the School of Public and Environmental Affairs jointly offer a three-year program that qualifies students for a dual master's degree. The first semester of course work toward the dual degree should normally be completed in the School of Public and Environmental Affairs to complete prerequisite courses that are only offered in the fall semester.

Admission Requirements

Same as for the Master of Arts degree except that application must also be made to the School of Public and Environmental Affairs for study toward the Master of Public Affairs degree. Students must be accepted by both units to be admitted to the dual degree program.

CEUS Course Requirements

Twenty-four credit hours of graduate course work to be distributed as follows: (1) three courses (9 credit hours) on the culture, history, or society of the region of specialization; (2) two elective or "open" courses (6 credit hours) taught in the Department of Central Eurasian Studies that may include any graduate-level credit course not used to satisfy other requirements. Students are encouraged to take one of their electives in another region of specialization in the Department of Central Eurasian Studies; (3) intermediate level (6 credit hours) of one language of specialization taught in the Department of Central Eurasian Studies, selected according to the region of specialization; (4) R691; (5) an M.A. thesis (no credit hours) of not fewer than 50 and not more than 70 double-spaced pages (text and notes) that reflects the use of materials in the student's language of specialization or in at least one research language other than English; (6) demonstration of reading proficiency (no credit hours) in a modern research language such as French, German, or Russian. The professional research methodology course requirement (3 credit hours) for a CEUS M.A. shall be satisfied by the methodology course required for the School of Public and Environmental Affairs M.P.A.

Public and Environmental Affairs Course Requirements

Thirty-six credit hours of graduate course work to be distributed as follows: (1) three professional development practicum courses (3 credit hours) V501, V503, and V505; (2) six courses (18 credit hours) V502, V506, V517, V540, V560, V600; (3) five specialized concentration courses (15 credit hours) that may include SPEA, CEUS, and other courses to be selected in consultation with a SPEA advisor.

Note on Tuition Costs

Students in this dual-degree program may find variance in their tuition charges. There is no standardized method of coding students in dual-degree programs. The School of Public and Environmental Affairs and the College of Arts and Sciences charge different graduate tuition rates per credit hour. You will initially be coded in the School of Public and Environmental Affairs. As you near the half-way point in your dual-degree program, you should contact either SPEA or the College, so arrangements can be made to change your coding and the second half of your degree can be charged at the other unit's tuition rate. Check with the Recorder of either school if you have questions.

Dual Masters of Arts in Central Eurasian Studies and Master of Business Administration (M.A./M.B.A.) Degree

The Department of Central Eurasian Studies, in cooperation with the Kelley School of Business, offers a three-year program that qualifies students for two Master's degrees. Study in the dual degree program allows students to complete the M.A. and M.B.A. with a total of 66 credit hours rather than the 84 hours that would be required to take the two degrees separately. Under this program, the degrees must be awarded simultaneously.

Admission

Students must apply separately for admission to the M.A. program in Central Eurasian Studies and the M.B.A. program in the School of Business and must be accepted by both units in order to be admitted to the dual degree program. Students may apply for admission to both programs simultaneously. Alternatively, students may apply first for the M.A. in Central Eurasian Studies and apply for the M.B.A. program during their first year of study; they can then enter the dual degree program in their second year of study, provided that they have completed no more than 24 hours of M.A. credit before starting work on the M.B.A. Either way, students will spend one year in the College of Arts and Sciences and one year at the School of Business and the final year completing the final requirements (including the thesis) of both programs.

CEUS Requirements: Course Work, Thesis, and Research

Language

Twenty-four credit hours of graduate course work to be distributed as follows: (1) three courses (9 credit hours) on the culture, history, or society of the region of specialization; (2) two courses (6 credit hours) at the intermediate level of a language of specialization selected according to the region of specialization; (3) two electives (6 credit hours) taught in the Department of Central Eurasian Studies, which may include further courses in the student's region of specialization, in another region of specialization, or advanced level courses in the language of specialization; (4) R691; (5) an M.A. thesis (no credit hours) of no less than 50 and no more than 70 double-spaced pages (text and notes) that reflects the use of materials in the student's language of specialization and in at least one other research language other than English; and (6) demonstration of reading proficiency in a modern research language such as French, German, or Russian.

Business Course Requirements

Required and elective courses for a total of 42 credit hours. The possibilities of course combinations are many and will depend on your specific career goals. All students in the dual degree program are strongly urged to arrange a course of study that includes courses in international business. For full details, contact the M.B.A. program office at 812-855-8006.

Note on Tuition Costs

Students in this dual-degree program may find variance in their tuition charges. There is no standardized method of coding students in dual-degree programs. The Kelley School of Business and the College of Arts and Sciences charge different graduate tuition rates per credit hour. You will initially be coded in one unit or the other. As you near the half-way point in your dual-degree program, you should contact either BUS or the College, so arrangements can be made to change your coding and the second half of your degree can be charged at the other unit's tuition rate. Check with the Recorder of either school if you have questions.

Dual Master of Arts in Central Eurasian Studies and Master of Information Science (M.A./M.I.S.) Degree

The Department of Central Eurasian Studies offers a dual degree program in cooperation with the School of Library and Information Science that prepares students for a wide range of careers requiring a combination of technical skills in information science, foreign language proficiency, and area expertise. Study in the dual degree program allows students to complete the M.A. and M.I.S. with a total of 60 credit hours rather than the 72 hours that would be required to take the two degrees separately. Students take at least 24 credit hours in CEUS and at least 36 graduate credit hours in library and information science. Under this program, the two degrees must be awarded simultaneously.

Admission

Students must apply separately for admission to the M.A. program in Central Eurasian Studies and the M.I.S. program in the School of Library and Information Science and must be accepted by both units in order to be admitted to the dual degree program. Students may apply for admission to both programs simultaneously. Alternatively, students enrolled in one program may apply for admission to the other anytime before the completion of their degree.

CEUS Requirements: Course Work, Thesis, and Research Language

Twenty-four credit hours of graduate course work to be distributed as follows: (1) three courses (9 credit hours) on the culture, history, or society of the region of specialization; (2) two courses (6 credit hours) at the intermediate level of a language of specialization selected according to the region of specialization; (3) two electives (6 credit hours) taught in the Department of Central Eurasian Studies, which may include further courses in the student's region of specialization, in another region of specialization, or advanced level courses in the language of specialization; (4) R691, an independent study course (3 credit hours) that will serve as the MA thesis course (5) an MA thesis (no credit hours) of no less than 50 and no more than 70 double-spaced pages (text and notes) that reflects the use of materials in the student's language of specialization and in one other research language other than English; and (6) demonstration of reading proficiency in a modern research language such as French, German, or Russian.

School of Library and Information Science Requirements

Students must take 21 credit hours of required M.I.S. courses (S510, S511, S513, S515, S516, S556, a programming course in or outside of SLIS) and at least 15 credit hours of SLIS elective courses (36 credit hours).

Note on Tuition Costs

Students in this dual-degree program may find variance in their tuition charges. There is no standardized method of coding students in dual-degree programs. The School of Library and Information Science and the College of Arts and Sciences charge different graduate tuition rates per credit hour. You will be coded in one school. As you near the half-way point in your dual-degree program, you should contact either SLIS or the College,

so arrangements can be made to change your coding for the second half of your degree to be charged at the other unit's tuition rate. Check with the Recorder of either school if you have questions.

Dual Master of Arts in Central Eurasian Studies and Master of Library Science (M.A./M.L.S.) Degree

The Department of Central Eurasian Studies offers a dual degree program in cooperation with the School of Library and Information Science. Study in the dual degree program allows students to complete the M.A. and M.L.S. with a total of 54 credit hours rather than the 66 hours that would be required to take the two degrees separately. Students take at least 24 credit hours in CEUS and at least 30 graduate credit hours in library and information science. Under this program, the two degrees must be awarded simultaneously.

Admission

Students must apply separately for admission to the M.A. program in Central Eurasian Studies and the M.L.S. program in the School of Library and Information Science and must be accepted by both units in order to be admitted to the dual degree program. Students may apply for admission to both programs simultaneously. Alternatively, students enrolled in one program may apply for admission to the other anytime before the completion of their degree.

CEUS Requirements: Course Work, Thesis, and Research Language

Twenty-four credit hours of graduate course work to be distributed as follows: (1) three courses (9 credit hours) on the culture, history, or society of the region of specialization; (2) two courses (6 credit hours) at the intermediate level of a language of specialization selected according to the region of specialization; (3) two electives (6 credit hours) taught in the Department of Central Eurasian Studies, which may include further courses in the student's region of specialization, in another region of specialization, or advanced-level courses in the language of specialization; (4) R691, an independent study course (3 credit hours) that will serve as the M.A. thesis course (5) an M.A. thesis (no credit hours) of no less than 50 and no more than 70 double-spaced pages (text and notes) that reflects the use of materials in the student's language of specialization and in one research language other than English; and (6) demonstration of reading proficiency in a modern research language such as French, German, or Russian.

School of Library and Information Science Requirements

In addition to the SLIS S401 pre-requisite, students must complete 15 credit hours of SLIS M.L.S. Foundation courses and at least 15 credit hours of SLIS elective courses appropriate to the student's background and interests.

Students in this dual-degree program may find variance in their tuition charges. There is no standardized method of coding students in dual-degree programs. The School of Library and Information Science and the College of Arts and Sciences charge different graduate tuition rates per credit hour. You will initially be coded in one unit or the other. As you near the half-way point in your dual-degree program, you should contact either SLIS or the College, so arrangements can be made to change your coding and the second half of your degree can be charged at the other unit's tuition rate. Check with the Recorder of either school if you have questions.

Doctor of Philosophy Degree

Admission Requirements

M.A. degree or its equivalent in the Department of Central Eurasian Studies with a minimum 3.5 grade point average in departmental course work. If an M.A. degree was obtained elsewhere and included an M.A. thesis, the student must satisfy the Department of Central Eurasian Studies course requirements for the M.A. in one of the fields of specialization described previously, but need not write an M.A. thesis.

Course Requirements

A minimum of 78 credit hours of graduate course work (including those earned for the CEUS M.A.), Ph.D. course work shall be distributed as follows: four departmental courses relevant to the student's region of specialization (12 credit hours); three courses in the language of specialization and linguistics (9 credit hours); one 700-level seminar taught in the department (3 credit hours); outside minor (a minimum of 12 credit hours); elective courses (12 credit hours). Students complete the remainder of the 90 credit hours required by the College of Arts and Sciences by enrolling in R890 or in courses selected in consultation with their department advisor.

Outside Minor

Students must fulfill the requirements for a minor in an outside department or program. The minor should support the student's disciplinary specialization within the department and be chosen in consultation with the student's Graduate Advisory Committee.

Minors by Students from Other Departments

Ph.D. students majoring in other departments may take a minor in the Department of Central Eurasian Studies. This shall consist of 12 credit hours of courses taught in the department of which no more than 6 credits are language credit hours. The specific courses used to complete the minor in Central Eurasian Studies shall be approved in writing by the department faculty member who is selected by the student to serve on the student's Ph.D. qualifying committee as an outside minor representative. Students pursuing a minor are encouraged to identify a faculty advisor in the department as early as possible so that a well-integrated program of study can be established.

Research Language Requirement

Requires one research language in addition to the research language required for the M.A. degree.

Qualifying Examination

Written and oral.

The student will be examined in two fields with a separate faculty examiner for each field. The written portion of the qualifying examination will be two hours long for each of the two fields in which the student is to be examined. Prior to the exam, the student, in consultation with the faculty examiners, will prepare an examination reading list for each field. These reading lists must include works

in both the language of specialization and the research languages. These reading lists will be kept on file with the examinations. Each of the faculty examiners will prepare three or four questions, of which the student will answer two, allowing approximately one hour for each question.

Marks of “high pass,” “pass,” and “failure” will be assigned to each field in the written and oral examinations. Unsatisfactory performance in one field of the written examination will require repetition of the examination in that field before the orals may be taken. Failing marks received in two fields of the written examination will constitute failure in the written part, and the student will not be allowed to retake the written examination during the same semester. If the student fails the written examination twice, consent to continue work in the department will be withdrawn.

Unsatisfactory performance in one field of the oral examination will require repetition of the examination in that field. Failing marks received in two fields of the oral examination will constitute failure in the oral part, and the student will not be allowed to retake the oral examination during the same semester. If the student fails the oral examination twice, permission to continue work in the department will be withdrawn.

Dissertation
Required.

Final Examination
Defense of dissertation.

Faculty

Chairperson

Associate Professor Christopher P. Atwood*

Graduate Faculty
(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Denis Sinor* (Emeritus)

Ottoman and Modern Turkish Studies Professor

Kemal Silay*

Professors

Ilhan Basgöz* (Emeritus), Gustav Bayerle* (Emeritus), Christopher I. Beckwith*, Yuri Bregel* (Emeritus), Jamsheed K. Choksy*, Devin A. DeWeese*, William Fierman*, Henry Glassie* (Emeritus, Folklore), György Kara*, Paul Marer* (Emeritus, Business), Toivo Raun*, M. Nazif Shahrani*, Kemal Silay*, Mihály Szegedy-Maszák* (Emeritus)

Associate Professors

Christopher P. Atwood*, Matthias Lehmann* (Adjunct, History), Paul E. Losensky*, Elliot H. Sperling*

Assistant Professors

Gardner Bovingdon*, H. Erdem Cipa*, Christiane Gruber (Adjunct, Fine Arts), Lynn Marie Hooker*, Hans Peter Ibold (Adjunct, Journalism), Richard Nance (Adjunct, Religious Studies), Ron Sela*

Academic Specialist

Edward Lazzerini

Director of Graduate Studies

Associate Professor Paul E. Losensky*, Goodbody Hall 207, (812) 855-9665.

All official advising after the second semester of enrollment is done by the student’s Graduate Advisory Committee.

Courses

History, Civilization, or Other Culture Courses
Baltic-Finnish
CEUS–R 501 The Baltic States Since 1918 (3 cr.)
This course introduces the Baltic states at the graduate level. We cover independence during the Russian Revolution and three eras: interwar, Soviet rule, and the re-establishment of independence and aftermath. Socio-economic change and culture also receive attention. The approach is comparative. Weekly meetings are centered on discussion of common readings.

CEUS–R 502 Finland in the 20th Century (3 cr.)
This course studies modern Finnish history in depth. The course stresses the following: Russification; 1905 Revolution; independence; interwar period, the Winter War and the Continuation War; “Finlandization,” economic miracle, and welfare state; changing role of women; Finland as part of Scandinavia; literature, art, and music; and membership in the EU.

CEUS–R 504 Modern Finnish Literature (3 cr.) This lecture and discussion course examines the major works of modern Finnish literature in translation. Themes include: urbanization, industrialization, independence, the individual and society, alcoholism, the Sixties, position of women, and influence of fine arts, music, performing arts, and film. Weekly written homework and class discussion.

CEUS–R 508 Estonian Culture and Civilization (3 cr.)
This course explores Estonian cultural development, including folklore and oral tradition, religion, language and literature, literacy and education, high culture (music, art, theatre, film), and the rise of an Estonian press and printing in general. Some comparison will be made to neighboring and other European traditions. Media presentations illustrate these developments.

CEUS–R 509 Topics in Baltic-Finnish Studies (3 cr.)
Topics in Baltic-Finnish Studies is used for new classes in Baltic-Finnish studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 600 Advanced Readings in Baltic-Finnish Studies (1–6 cr.) This course number is for tutorials in advanced topics in Baltic-Finnish studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 700 Seminar in Baltic-Finnish Studies (3 cr.)
Seminar in Baltic-Finnish Studies introduces doctoral

students to current areas of research in Baltic-Finnish studies, using primary sources, full review of secondary literature, sounds philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

Central Asian

CEUS–R 510 Introduction to Central Asian History (3 cr.) The breakup of the Soviet Union has dramatically increased global interest in Central Asia. This course offers students opportunity to explore Central Asia's role in world history, in Islam, and as linking East Asia, South Asia, the Middle East, and Eastern Europe. Readings include Central Asian sources in English translation.

CEUS–R 511 Travelers and Explorers in Central Asia (3 cr.) This course charts the exploration of Central Asia (from China to Iran) in the eighth through nineteenth centuries as a gateway to this fascinating but under-studied region. Using primary sources in English translation, we will evaluate these travelogues as sources, comparing and contrasting medieval and modern, insider and outsider, perspectives.

CEUS–R 512 Shrine and Pilgrimage in Central Asian Islam (3 cr.) This course surveys religious beliefs and activities involving shrines and pilgrimage to holy places in Muslim Central Asia, from beginnings to today. Our aim will be to understand both how shrines served the religious needs of Central Asian Muslims and the relationship between shrine-centered religious life and "normative" religious practices.

CEUS–R 513 Islam in the Former Soviet Union (3 cr.) This course surveys Islam and Muslim communities in areas of the former USSR. After basic coverage of Islam, Russian expansion, and their interaction, we focus on the pressures experienced and exerted by Islam, as religion and socio-cultural system, with attention to religious life's adaptations to the Soviet and post-Soviet context.

CEUS–R 514 Islamization in Inner Asia (3 cr.) This course seeks to understand the distinctive character of Islam in Inner Asia. Introductory lectures treat religious change and "conversion," and geographic, ethnic, and political contexts. Later lectures explore cases of Islamization, emphasizing indigenous accounts and their significance in Islamic and Inner Asian patterns of religious meaning and ritual.

CEUS–R 515 Politics & Society in Central Asia (3 cr.) This course introduces Central Asia, esp. of the former Soviet Union, focusing on the 1980s and beyond. Main topics are politics, society, and economy; others include demography, Islam, women, and foreign policy. The format is primarily lecture, with three essay exams, graduate students complete a paper or project.

CEUS–R 516 Peoples and Cultures of Central Asia (3 cr.) Anthropology of former Soviet Central Asia and adjacent areas of Iran and Afghanistan. Topics: ecology; ethnohistory; subsistence traditions; kinship, gender, and identities; religion; transformations under Russia, Iran, Afghanistan, and the war on terrorism. No previous knowledge presumed; background in anthropology helpful. Course consists of lectures, readings, films, slides, and discussion.

CEUS–R 527 Post-Soviet Central Asia Politics, Economy and Foreign Policy (3 cr.) This course will focus on political, economic, and foreign issues since 1991 in the five former Soviet republics that emerged as independent countries in Central Asia. Our main focus will be the similarities and differences among the newly independent states of Central Asia.

CEUS–R 528 Post-Soviet Central Asia; Identity, Language, and Social Issues (3 cr.) P: Some familiarity with Central Asia and/or political, economic, and social issues in other post-Soviet countries. This course focuses on the development in a variety of policy areas since 1991 in the five former Soviet republics that emerged as independent countries in Central Asia. Each class will be a different topic although we will concentrate on similiarities and differences among newly independent states of Central Asia.

CEUS–R 529 Topics in Central Asian Studies (3 cr.) Topics in Central Asian Studies is used for new classes in Central Asian studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 610 Advanced Readings in Central Asian Studies (1–6 cr.) This course number is for tutorials in advanced topics in Central Asian studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 611 Ethnic History of Central Asia (3 cr.) This course surveys Central Asia's ethnic history from ancient times to today. Part of the Islamic world, Central Asia has been a crossroads of cultures. Nomadic migrations, Russia and China's imperial policies, and Central Asian nationalism further affected interethnic relations. The course provides background to understand interethnic relations there today.

CEUS–R 612 Central Asia Under Russian Rule (3 cr.) This course surveys Russia and Central Asia's complex relations, covering Russian expansion in the 16th century, Russian conquest in the 19th century, socio-political developments, and emergence of modern nations in the 1920s. Themes addressed include: mechanisms of Empire, dynamics between Conqueror and Conquered, and colonial administration of Islamic peoples.

CEUS–R 613 Islamic Central Asia, Sixteenth-Nineteenth Centuries (3 cr.) This course surveys Islamic Central Asia from the 16th century to the Russian conquest: especially Chinggisid Uzbek states and the 'tribal' dynasties, but also East Turkestan to 1755, and nomadic Qazaqs, Qirghiz, and Turkmens. Themes include political institutions, legitimation, nomads and sedentaries, ethnic developments, religion and culture; sources and historiography.

CEUS–R 614 Yasavi Sufis and Central Asian Islam (3 cr.) This course surveys the Yasavi Sufi tradition, a major religious current in Islamic Central Asia since the 13th century. We explore its historical and religious background, the life of its founder, Khoja Ahmad Yasavi, transmission lineages, the coalescence of the Yasavi Sufi "order," and its legacy in contemporary Central Asia.

CEUS–R 615 The Naqshbandi Sufi Tradition in Central Asia (3 cr.) Familiar in India and the Ottoman Middle East, the Naqshbandi order is less well known in its Central Asian homeland. This course covers Sufism in Central Asia, challenges under Mongol rule, early founding figures, doctrinal profile and practices, and the subsequent history of the Naqshbandi communities to the 20th century.

CEUS–R 616 Religion and Power in Islamic Central Asia (3 cr.) Course explores the role of religious figures and institutions in sanctioning, exercising, and/or underminding political authority in Islamic Central Asia. The course focuses on the political influence wielded by the local representatives of Islam's spiritual ideal, especially Sufi shaykhs and how they used their extraordinary socio-economical, and political power.

CEUS–R 627 Islam and Modernity in Central Eurasia, 1850-present (3 cr.) Understanding the background to headlines about Islam today demands serious reading of sources, appreciation of Islam's diversity, and awareness of internal controversies. In recent centuries, Muslims, like other religious believers, have been challenged by modernity. How Muslims of Central Eurasia have responded to modernity is this course's primary theme.

CEUS–R 628 Russia's Orient 1552-1924 (3 cr.) This graduate course examines the relationship between Russia and the Turkic peoples in the Black Sea, Caucasus, and Volga-Ural regions, as well as nomadic and sedentary Central and Inner Asia. Themes include: Russian expansion, efforts to situate the "oriental" Other within the Empire, imperial management, and indigenous resistance and accommodation.

CEUS–R 629 Islamic Hagiography of Central Asia (3 cr.) P: Reading knowledge of Persian or Chaghatay or Turkic. This course familiarizes students with Central Asia's Islamic hagiographical from the 12th-19th centuries, introduces them to problems in interpreting it, and provides experience in reading examples. After introductory lectures, the course is devoted to guided readings in Persian and/or Chaghatay Turkic hagiographies, mostly drawn from unpublished manuscripts.

CEUS–R 710 Seminar in Central Asian Studies (3 cr.) Seminar in Central Asian Studies introduces doctoral students to current areas of research in Central Asian studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

CEUS–R 713 Sources for the Study of Central Asian History (3 cr.) This seminar is fundamental training for graduate students in the field of Central Asian history. Lectures cover thoroughly all types of sources used for the study of Central Asian history during the Islamic period (8th-19th c.), with special emphasis on written sources, both in indigenous and European languages.

Central Asian-Xinjiang

CEUS–R 530 Politics in Modern Xinjiang (3 cr.) Xinjiang has been a colony of the Manchu empire, a warlord fiefdom, an independent republic, and an "autonomous region" in China. This course covers Xinjiang' politics from 1900 to the present, focusing on Islam, identity politics, immigration, language battles, cultural resistance, the Production and Construction Corps, political economy, and oil.

CEUS–R 531 Grave Robbers, Missionaries, and Spies: Foreign Adventurers in Chinese Turkistan (3 cr.) From the 19th century to the mid-20th, the mysteries of Xinjiang (Chinese Turkestan) lured outsiders: missionaries, archeologists, treasure hunters, adventurers, scouts, officials, and outright spies. Fortunately, many left readable accounts of their discoveries. Through them we explore both the region's attraction to outsiders and their influence on the region.

CEUS–R 532 From Kingdom to Colony to Province: History of Xinjiang to 1911 (3 cr.) This course introduces the tumultuous history of Xinjiang, geographically part of Central Asia, but now under China. We will cover cultural, ethnic, religious, and geopolitical changes up to 1911. Topics include ecology and economy, Uyghur, Chinese, Mongol, and Manchu empires, Islamicization, the Jadidist movement, and stirrings of nationalism.

CEUS–R 533 Cultures and Civilization of Xinjiang (3 cr.) This course surveys Xinjiang (Chinese Turkestan) from prehistory to today: material life, languages, literature, arts, and religion. With texts and audiovisuals, we will consider the "mummy controversy," Xinjiang on the so-called Silk Road, Islamicization, and cultural diversity today. Themes include cultural borrowing, "clash of civilizations," and the politics of multiculturalism.

Hungarian

CEUS–R 540 Introduction to Hungarian Studies (3 cr.) What makes Hungary special? How have Hungarians drawn on surrounding cultures? This course introduces major issues in Hungarian Studies, from the migration to the present. After a geographic survey, we explore issues of Hungarian identity, with particular reference to issues of ethnicity, religion, and culture, both high and low.

CEUS–R 542 Roma Gypsy History & Culture (3 cr.) Europe's largest minority, the so-called "Gypsies," more properly the Roma, have been killed, hunted, and reviled; yet the exotic flavoring of "Gypsiness" has fascinated writers, artists, and composers. This course surveys Roma history and representations. No background in East European studies, music, or film is required; readings are in English.

CEUS–R 547 East Central European Cities in Comparative Perspective (3 cr.) This course explores East-Central European cities through history, sociology, literature, film and the arts: under Austrian or Russian rule until WWI, newly independent between the wars, under Soviet hegemony from WWII to 1989, and facing challenges of development and European integration since then. Main focus on Budapest, Warsaw, and Prague.

CEUS–R 549 Topics in Hungarian Studies (3 cr.) Topics in Hungarian Studies is used for new classes in Hungarian studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 551 Prophets, Poets, and Kings: Iranian Civilization (3 cr.) This course traces the history of Iranians from ancient times through the Arab conquest to today. It focuses on institutions, religions, secular and ecclesiastic hierarchies, minorities, devotional and communal change, and Iranian insfluences on Islam. No previous knowledge or course work required.

CEUS–R 640 Advanced Readings in Hungarian Studies (1–6 cr.) This course number is for tutorials in advanced topics in Hungarian studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 641 Art & Music of 19th & 20th Century Hungary (3 cr.) The 19th and 20th centuries saw the birth of Hungary's greatest artists and musicians, the development of national institutions in the arts, and debates over tradition vs. innovation, Hungarian folk elements vs. integration into Europe's artistic mainstream. This course surveys these major developments in Hungarian visual art and music.

CEUS–R 642 Bela Bartok: Composer in Context (3 cr.) This course surveys Bela Bartok's major compositions and writings, exploring how his eclectic and contradictory works responded to changing artistic and political climates of east-central Europe in the twentieth century's first half. Finally we will explore Bartok's legacy on both sides of the Iron Curtain, and since 1989.

CEUS–R 649 The Roma Through History, Music, and Film (3 cr.) Writers, artists, filmmakers, and composers have long exploited the exotic image of "Gypsies," or Roma. Roma musicians are also indispensable to folk and popular music practices around Europe. This course will examine both how this "mysterious" group has been represented and how its members have responded creatively to these representations.

CEUS–R 740 Seminar in Hungarian Studies (3 cr.) Seminar in Hungarian Studies introduces doctoral students to current areas of research in Hungarian studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

Iranian

CEUS–R 552 Peoples & Cultures of the Middle East (3 cr.) This ethnographic survey examines the social institutions and cultural forms in contemporary Middle Eastern societies-i.e., the Arab world, Israel, Turkey, Iran and Afghanistan. Topics include: ecology; Islam; pastoral nomadism, agriculture, and cities; colonialism and nation states; tribalism, ethnicity, and gender; and modernization, oil wealth, labor migration, and social unrest.

CEUS–R 554 Persian Literature in Translation (3 cr.) Study and analysis of selected readings from Persian literature in English translation. May concentrate on a particular theme, period, or author. Special attention paid to the historical and cultural contexts of the works, as well as problems in translation, critical analysis, and interpretation.

CEUS–R 559 Topics in Iranian Studies (3 cr.) Topics in Iranian Studies is used for new classes in Iranian studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

Central Eurasian

CEUS–R 650 Advanced Readings in Iranian Studies (1–6 cr.) This course number is for tutorials in advanced topics in Iranian studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 750 Seminar in Iranian Studies (3 cr.) Seminar in Iranian Studies introduces doctoral students to current areas of research in Iranian studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

Mongolian

CEUS–R 560 Modern Mongolia (3 cr.) In 1900 Mongolia was run by descendants of Genghis Khan and Buddhist lamas under China's last dynasty. In 1950 it was Soviet Russia's most loyal satellite, under the dictator Choibalsang. By 2000, Mongolia had become a democracy, with a struggling free-market economy. This course explores Mongolia's wrenching changes since 1900.

CEUS–R 561 Mongolia's Middle Ages (3 cr.) This class covers the Mongolia's "middle ages" between the Mongol world empire and the modern era: 1350 to 1850. Topics include the nobility, Oirats, Buddhist conversion, Manchu-Chinese rule, and Buriats and Kalmyks in Russia. Readings include modern histories and sources in translation studied in a format combining lecture and discussion.

CEUS–R 562 Mongolian Civilization and Folk Culture (3 cr.) Introduction to Mongolian traditional civilization: material culture (dwelling, clothing, food, warfare, hunting, animal husbandry, crafts, agriculture, etc.), social and spiritual life (kinship, wedding, birth, names, childhood, races, medicine, death, folk religion, Buddhism, shamanism, values and taboos, omens), folk arts (music, oral literature, dance, etc.). No knowledge of Mongolian is required.

CEUS–R 563 Mongolian Historical Writings (3 cr.) P: Intermediate Mongolian or Classical Mongolian. Overview of traditional Mongolian historiography and other Mongolian historical sources: secular and religious chronicles, genealogies, biographies, works, inscriptions, edicts, letters, etc. from Chinggis Khan's time to the early twentieth century. A selection of sources of various genres are read, translated and analyzed, and their interpretation discussed.

CEUS–R 564 Shamanism and Folk Religion of the Mongols (3 cr.) What is shamanism? What is its role in Mongol communities? Is it a religion? What is its relation to folk beliefs and world religions? Who becomes a shaman or shamaness? What skills, tools, and techniques are necessary? These questions will be discussed in this class; knowledge of Mongolian not required.

CEUS–R 569 Topics in Mongolian Studies (3 cr.) Topics in Mongolian Studies is used for new classes in Mongolian studies, aimed at M.A. and early Ph.D. students and/or upper division under-graduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 660 Advanced Readings in Mongolian Studies (1–6 cr.) This course number is for tutorials in advanced topics in Mongolian studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 661 Mongolian Literature and Folklore (3 cr.) Interaction of orality and writing. History of Mongol literary studies. Internal and external sources. Broad and narrow concepts of literature. Periods and areas. Connections with other arts and the sacred. Authorship and anonymity. Original and translated works. Indo-Tibetan, Chinese, Turkic and Western influences. Prose and verse. Narrative and lyric genres.

CEUS–R 662 Modern Inner Mongolia (3 cr.) This course explores Inner Mongolia's history from 1850 to today. Themes include Inner Mongolia as a bi-ethnic borderland, demography, the "New Schools Movement," pan-Mongolism, land reform, development and the environment. Students will think through issues of ethnicity, state-building, and globalization in both Inner Asian and Chinese contexts.

CEUS–R 666 Mongolian Languages and Dialects (3 cr.) The course investigates the following topics in all attested Mongolic languages: language and dialects; periods, sources, and scripts; vowels & vowel harmony; consonants; historical morphology; personal pronouns; the n-stems; changes in verb systems; plurals; fusion, contraction; syntax change; negation & interrogation; word order; lexicon and loan words.

CEUS–R 667 Mongolic Writing Systems (3 cr.) The course discusses the writing systems used by medieval and modern Mongolic peoples, the origins, functions, and classifications of scripts, their relation to religion and statehood. Introduction is given to the Kitan, Uyghur, 'Phags-pa, Galik, Oirat, etc. scripts, and to Mongolic in Manchu, Tibetan, Latin, Cyrillic and Arabic alphabets.

CEUS–R 760 Seminar in Mongolian Studies (3 cr.) Seminar in Mongolian Studies introduces doctoral students to current areas of research in Mongolian studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

CEUS–R 761 Ordos Documents (3 cr.) This course introduces (in original Mongolian with English translation) documents collected in the early twentieth century in southern Ordos (Inner Mongolia), which illustrate both Mongolian life and Mongolian studies methodology. The course's aim is to understand pre-revolutionary Mongolian society through the use of native documentary material.

Tibetan

CEUS–R 570 Introduction to the History of Tibet (3 cr.) This course surveys Tibet's history from beginning to today. Students study facets of Tibet's history that include: the Tibetan empire of the 7th-9th centuries, the impact of Buddhism, Tibet's relations with neighboring peoples, the rise of the Dalai Lama, and the current issue of Tibet.

CEUS–R 571 Tibet and the West (3 cr.) This course examines Western perceptions of Tibet during the past 700 years, comparing Tibetan civilization with popular conceptions that prevailed in the West during corresponding periods. Tibet as "Shangrila," reflected in such novels and films as Lost Horizon, will be examined along with Tibetan perceptions of Westerners and Western civilization.

CEUS–R 572 Sino-Tibetan Relations (3 cr.) This course surveys interaction between Tibet and China from beginnings to today, touching on political, cultural, economic, and religious links. Areas explored include the rise of Tibet as a dynamic empire competing with Tang China, religious links between Tibetan hierarchs and Chinese rulers, and conflict over Tibet's incorporation into China.

CEUS–R 573 The Religions of Tibet (3 cr.) This course surveys the history of Tibetan religions, and their impact on Tibetan society and culture. It will consider interactions between religions and politics and how they shaped public lifestyles, inspire movements, and molded identity through the centuries. Coverage will be both chronological and thematic.

CEUS–R 579 Topics in Tibetan Studies (3 cr.) Topics in Tibetan Studies is used for new classes in Tibetan studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 670 Advanced Readings in Tibetan Studies (1–6 cr.) This course number is for tutorials in advanced topics in Tibetan studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 770 Seminar in Tibetan Studies (3 cr.) Seminar in Tibetan Studies introduces doctoral students to current areas of research in Tibetan studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

CEUS–R 771 Introduction to Chinese Sources for Tibetan Studies (3 cr.) This course introduces the voluminous corpus of Chinese-language sources on Tibet: standard histories, unofficial histories, geographies, literary compositions, collectanea, etc. They will learn how to locate, handle, and navigate these materials.

Students will also learn the major modern works of Chinese Tibetology, including journals and Chinese-language translations of Tibetan writings.

Turkish

CEUS–R 580 Literature of the Ottoman Court in Translation (3 cr.) The course involves reading and analyzing representative literary texts of the Ottoman court, both poetry and prose. It introduces various literary forms of Ottoman authors: gazel, kaside, mesnevi, tezkire, etc. We will use both the classical Ottoman canon, as well

as modern and contemporary theoretical approaches for interpretation.

CEUS–R 582 Cultural History of the Ottoman Empire & Modern Turkey (3 cr.) This course introduces the rich and varied cultures of Turkey, from Ottoman times to today. It covers issues such as: literary and vernacular languages, women, Kemal Ataturk, Turkish Islams; education; Kurdish nationalism; and Turkey and Europe. Along with readings, Turkish films and other visual materials will be used.

CEUS–R 583 Ten Sultans, One Empire: Ottoman Classical Age 1300-1600 (3 cr.) This course traces the Ottoman Empire from its beginnings to its height under Suleyman the Magnificent. Themes include: Turks before the empire; Asia Minor before the Turks; rival principalities; centralization; Ottomans as European and Middle Eastern; economy, society, religion, law, learning; ethnic/cultural diversity; and the "classical age" as a concept.

CEUS–R 589 Topics in Turkish Studies (3 cr.) Topics in Turkish Studies is used for new classes in Turkish studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 680 Advanced Readings in Turkish Studies (1–6 cr.) This course number is for tutorials in advanced topics in Turkish studies. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 780 Seminar in Turkish Studies (3 cr.) Seminar in Turkish Studies introduces doctoral students to current areas of research in Turkish studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

General

CEUS–R 592 Uralic Peoples & Cultures (3 cr.) This course surveys the Uralic (Finno-Ugric and Samoyed) peoples of northern Europe and Siberia. Topics include their origins and history, traditional and modern cultures, ethnic and national identity, development and modernization, and political independence and Russian rule. We will also cover inter-relations among Uralic peoples in the modern era.

CEUS–R 593 The Mongol Century (3 cr.) This course explores in depth Chinggis Khan's Mongol empire from its origins in the 13th century to the continent-wide break down of the 1330-1370s. Format alternates lectures and discussion of primary sources (Mongolian, Chinese, Middle Eastern, and European) in translation, including many of the medieval era's greatest histories and travelogues.

CEUS–R 594 Environmental Problems and Social Constraints in Northern and Central Eurasia (3 cr.) This course analyzes for undergraduate and graduate students environmental and social conditions in the immense region of Northern and Central Eurasia (former Soviet Union). The course covers; 1) general environment and political situation; 2) environmental transformation under Soviet rule; 3) environmental and public health problems; 4) conclusions on current trends.

CEUS–R 595 Politics of Identity in China and Inner Asia (3 cr.) This course challenges the assumption that terms like "Chinese," "Taiwanese," or "Kazakh" represent straightforward concepts. Via theories of identity, and careful attention to the history of China and Inner Asia, we will explore - and explode - the association of identity and descent, language and ethnicity, citizenship and nationality.

CEUS–R 596 The Rus, Khazars, and Bolgars (3 cr.) Three kaganates—Rus' (the precursor of Russia), Khazar, and Bolgar—vied for power in the early medieval Eurasian steppe. These states, one Slavic and two Turkic-speaking, created the first cities in the region; Christian, Judaic, and Islamic conversions followed. Course examines all three kaganates equally in their aspects and interrelations.

CEUS–R 599 Topics in Central Eurasian Studies (3 cr.) Topics in Central Eurasian Studies is used for new classes in Central Eurasian studies, aimed at M.A. and early Ph.D. students and/or upper division undergraduates. Such classes are typically taught by a mix of lecture and discussion.

CEUS–R 690 Advanced Readings in Central Eurasian Studies (1–6 cr.) This course number is for tutorials in advanced topics in Central Eurasian studies that cover multiple CEUS areas or do not fit comfortably in any specific area. Readings may include work on demanding classical texts or a survey of the secondary literature on a topic or some combination thereof.

CEUS–R 691 CEUS M.A. Thesis Research (3 cr.) This course is required for all CEUS graduate students seeking a master's degree who have not written a thesis for a previous M.A. degree. It is normally taken during the fourth or fifth semester of a student's enrollment concurrently with writing a thesis. It is not repeatable.

CEUS–R 693 Theorizing Central Eurasia: The Problems of Nationalism (3 cr.) This course introduces students to nationalism's key works and questions. How are nations and nationalism related? Are nations imagined and invented or ancient and enduring? Are nationalism, communism, and religiosity necessarily opposed? Are indigenous nationalisms more authentic than "official nationalisms"? Is Central Eurasian nationalism a "derivative discourse," imported from elsewhere?

CEUS–R 696 Manchu Historical Sources (3 cr.) Reading and analyzing materials in Standard (Classical) and in Pre-Classical Manchu script. Overview of Manchu historiography. Documents, decrees, annals, chronicles (the Veritable Records), biographies or genealogies (the Clear Registers), itineraries (e.g., Tulishen's Travels), imperial inscriptions, inscriptions on cannons, narratives (e.g., Song Yun's talks about Russo-Manchu trade relations).

CEUS–R 697 Soviet & Post-Soviet Nationality Policies & Problems (3 cr.) Course devoted to nationality problems in the USSR, focusing on the Gorbachev period. Reviews theories of nationalism, history of Soviet nationality policy, and specifics of individual republics. Concludes with consideration of issues during glasnost,

and their significance in various republics across USSR: environmental, history/culture, language, economic development, and migration.

CEUS–R 698 Empire & Ethnicity in Modern Russia (3 cr.) Comparative study of the concept of empire and the rise of national movements among the major nationalities in tsarist Russia and the USSR from the mid-19th century to the post-Soviet era. Focuses on imperialism, nationality policy, and factors shaping the evolution of national identity.

CEUS–R 699 Central Eurasian Languages (3 cr.) This course examines the Central Eurasian languages and recent linguistic work on them. The Sprachbund ('linguistic area') theory is examined, as are major relationship theories, both divergent ('genetic') and convergent. Families covered include Finno-Ugric, Indo-European, Mongolic, Puyo-Koguryoic, Tibeto-Burman, Tungusic, and Turkic. No prior knowledge of Central Eurasian languages assumed.

CEUS–R 711 Seminar on Comparative Study of Central Asia and Middle East (3 cr.) This seminar explores various issues in Central Asian and the Middle Eastern society from an anthropological perspective. Past topics include "Islam and Politics," "Representations of Islam and Muslims," and "Family, Gender, and the Crisis of Masculinity."

CEUS–R 790 Seminar in Central Eurasian Studies (3 cr.) Seminar in Central Eurasian Studies introduces doctoral students to current areas of research in Central Eurasian studies, using primary sources, full review of secondary literature, sound philological methodology, and/or theoretically sophisticated research designs. Classes will address particular areas and issues of interest to faculty and advanced graduate students.

CEUS–R 890 Ph.D. Thesis (1–6 cr.) This course serves two purposes: 1) it may be used for credit for advanced readings related to doctoral research; 2) it maintains one's student status as Ph.D. candidate ("ABD") while researching and writing the Ph.D. dissertation. In either function, this class is repeatable.

Languages

Azerbaijani

CEUS–T 583 Introductory Azerbaijani I (3 cr.) Introductory Azerbaijani I stresses a communicative/interactive approach. We learn to handle basic everyday situations, such as greetings, asking information, buying things, travel, phone calls, writing letters and so on. Every day at least a portion of class time will be devoted to the cultural aspects of the Azerbaijani society.

CEUS–T 584 Introductory Azerbaijani II (3 cr.) P: Grade of "B" or higher in CEUS-T583 or equivalent. Introductory Azerbaijani II continues Introductory Azerbaijani I.

CEUS–T 683 Intermediate Azerbaijani I (3 cr.) P: Grade of "B" or higher in CEUS-T 584 or equivalent. Intermediate Azerbaijani (Azeri) will use free discourse, prompted discussions, interviews, team activities, oral presentations, written exercises, video-based discussions, and grammar drills to expand first-year skills. Classes will be in Azerbaijani, with only some grammatical explanations or spot translations in English. Authentic Azerbaijani language materials are used throughout the course.

CEUS–T 684 Intermediate Azerbaijani II (3 cr.) P: Grade of B or higher in CEUS T683 or equivalent. Introductory Azerbaijani II continues Intermediate Azerbaijani I.

Chaghatay

CEUS–T 623 Chaghatay (3 cr.) P: Knowledge of one modern Turkic language or consent of instructor required; acquaintance with Persian is desirable. This course gives a basic knowledge of Chaghatay, the classical version of Uzbek and the common literary language of all Central Asian Turks from the 15th to the early 20th century. The course surveys Chaghatay literature, grammar, and the writing system together with the reading of Chaghatay texts, chiefly historical.

Estonian

CEUS–T 503 Introductory Estonian I (3 cr.) Assuming no previous knowledge of Estonian, Introductory Estonian I emphasizes oral communications, with attention to reading, writing, speaking and listening. With basic vocabulary and structures, students can talk about themselves and immediate surroundings, interact in service encounters, read short texts and write notes. Students also learn about Estonian culture.

CEUS–T 504 Introductory Estonian II (3 cr.) P: Grade of B or higher in T503 or equivalent. Introductory Estonian II uses a communicative approach to introduce Estonian pronunciation and basic grammar (morphology and syntax), and teach vocabulary and structures for everyday conversation. Up-to-date textbooks, audio- and videotapes, and authentic materials (newspapers, schedules, advertisements, the Internet etc.) will be employed to enhance language learning and provide cultural information.

CEUS–T 603 Intermediate Estonian I (3 cr.) P: Grade of B or higher in T504 or equivalent. This course builds on skills acquired during Introductory Estonian. First-year topics are reviewed in more detail and new topics, such as seasons, holidays, traditions and customs added. Longer reading texts are introduced. Video materials train listening comprehension. Conversation skills are developed beyond the structured exchanges learned at the Intro level.

CEUS–T 604 Intermediate Estonian II (3 cr.) P: Grade of B or higher in T603 or equivalent. Intermediate Estonian II finishes covering Estonian grammatical structures (morphology and syntax) and develops skills by reading, conversation, discussion, oral presentations, a weekly journal, short essays, and listening. Materials introduce Estonian culture, including current press sources (print and Internet), short fiction, poetry, documentaries, feature films, and new news programs.

CEUS–T 703 Advanced Estonian I (3 cr.) P: Grade of B or higher in T604 or equivalent. This course builds students' confidence as language users via class discussion of newspaper articles, fiction and poetry, class presentations, journal entries, summaries of articles, films and news clips, short essays, TV broadcasts, and audio tape recordings. We focus on structures of formal written Estonian and different registers of oral production.

CEUS–T 704 Advanced Estonian II (3 cr.) P: Grade of B or higher in T703 or equivalent. Advanced Estonian II consolidates students' knowledge of Estonian structure, and adds to vocabulary, especially in students' areas of

interest. While speaking, reading, listening and writing are developed, this course has more emphasis on reading and writing. Independent work and student contribution a must; class is tailored to individual interests.

CEUS–T 803 ADLS-Estonian (3 cr.) P: Grade of B or higher in T704 or equivalent. In this class, students who have finished Advanced Estonian II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Finnish

CEUS–T 501 Introductory Finnish I (3 cr.) This course introduces Finnish to students with no previous knowledge. We emphasize skills for everyday situations in Finland. You will also understand simple spoken Finnish for familiar topics and grasp the main points of brief messages. You will also learn the basic facts of Finnish culture and history.

CEUS–T 502 Introductory Finnish II (3 cr.) P: Grade of B or higher in T501 or equivalent. Introductory Finnish II continues Introductory Finnish I.

CEUS–T 601 Intermediate Finnish I (3 cr.) P: Grade of B or higher in T502 or equivalent. Intermediate Finnish I helps students who know the basics of Finnish to communicate in situations related to study, work and leisure, while learning specific issues of Finnish culture and history. Methods are learner centered, communicative and often problem-based, involving both instructor and peer learners.

CEUS–T 602 Intermediate Finnish II (3 cr.) P: Grade of B or higher in T601 or equivalent. Intermediate Finnish II continues Intermediate Finnish I.

CEUS–T 701 Advanced Finnish I (3 cr.) P: Grade of B or higher in T602 or equivalent. This course teaches advanced skills desirable for academic life and work. The goal is to communicate effectively in demanding oral and written situations, and to handle both writing and speech on demanding topics. You will also widen your knowledge on Finnish culture and history.

CEUS–T 702 Advanced Finnish II (3 cr.) P: Grade of B or higher in T701 or equivalent. This course teaches advanced skills desirable for academic life and work. The goal is to communicate effectively in demanding oral and written situations, and to understand both writing and speech on demanding topics. You will also widen your knowledge on Finnish culture and history.

CEUS–T 801 ADLS-Finnish (3 cr.) P: Grade of B or higher in T702 or equivalent. In this class, students who have finished Advanced Finnish II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Hungarian

CEUS–T 541 Introductory Hungarian I (3 cr.) Introductory Hungarian enables students to converse about basic topics, meet basic communicative needs, and read and write short texts with simple sentence patterns and everyday topics. Students learn to use fundamental Hungarian structures with comfort and confidence. Students also learn about Hungarian lifestyle, society and culture.

CEUS–T 542 Introductory Hungarian II (3 cr.) P: Grade of B or higher in T541 or equivalent. In Introductory Hungarian II, daily classes focus: listening to and conducting conversations, intonation exercises, grammar exercises and writing simple dialogues and essays. Topics include: traveling, work, housing, shopping, post office and bank, family. Important possessive structures and sentences as well as indefinite and definite verb conjugations are introduced.

CEUS–T 641 Intermediate Hungarian I (3 cr.) P: Grade of B or higher in T542 or equivalent. Intermediate Hungarian helps students converse more fluently about personal and simple academic topics, articulate their feelings and opinions, read short literary and scholarly texts, and write for basic personal, business, and academic purposes. Authentic texts and video teach about the life-style and social-historical facts of Hungary.

CEUS–T 642 Intermediate Hungarian II (3 cr.) P: Grade of B or higher in T641. Intermediate Hungarian helps students converse more fluently about personal and simple academic topics, articulate their feelings and opinions, read short literary and scholarly texts, and write for basic personal, business, and academic purposes. Authentic texts and video teach about Hungary. Moderately complex grammatical forms are introduced.

CEUS–T 741 Advanced Hungarian I (3 cr.) P: Grade of B or higher in T642 or equivalent. Assuming four semesters of Hungarian and substantial knowledge of grammar, syntax, and vocabulary, this course will enable students to converse about moderately complex personal, social, and academic topics, to read and understand a full range of literary genres, and to write and translate to meet most personal and academic needs.

CEUS–T 742 Advanced Hungarian II (3 cr.) P: Grade of B or higher in T741 or equivalent. In this course, students continue to learn how to converse about moderately complex personal, social, and academic topics, read and understand a range of genres, and write and translate for personal and academic needs. Based on readings, students extend vocabulary and develop a more academic style for conversation and writing.

CEUS–T 841 ADLS-Hungarian (3 cr.) P: Grade of B or higher in T742 or equivalent. In this class, students who have finished Advanced Hungarian II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skill. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Iranian

CEUS–T 656 Middle Iranian Languages (3 cr.) This variable title course introduces one or more of the following Iranian languages dating from the first to twelfth centuries: Middle Persian (Pahlavi); Middle Parthian and Manichaean Middle Persian; Sogdian; Bactrain and Saka. Documents are drawn from manuscripts, manuscript fragments, and/or inscriptions.

CEUS–T 658 Old Iranian Languages (3 cr.) Course covers alphabets, grammar, vocabulary, reading, translation, and analysis of texts in two Old Iranian languages: Avestan and Old Persian. Religious and sociopolitical documents will be examined from eighteenth to first centuries BCE through manuscripts and inscriptions.

Kazakh

CEUS–T 513 Introductory Kazakh I (3 cr.) This class introduces basic communication skills in Kazakh. Students learn the sounds, alphabet, and basic grammar. Upon finishing, students will be able to use Kazakh in basic communicative contexts. Readings, class discussions, listening activities adapted from Kazakh language media programs. Films and extra-curricular cultural activities develop awareness of Kazakh culture.

CEUS–T 514 Introductory Kazakh II (3 cr.) P: Grade of B or higher in T513 or equivalent. This class offers basic communication skills and basic grammar of Kazakh. You will master simple to moderately complex sentences. Listening to Kazakh language media programs, film viewing, and cultural activities will also develop awareness of Kazakh culture. As textbooks are lacking, teaching materials are distributed via handouts and copies.

CEUS–T 613 Intermediate Kazakh I (3 cr.) P: Grade of B or higher in T514 or equivalent. Intermediate Kazakh builds on and extends the foundations established in Introductory Kazakh to improve basic language skills: speaking, reading, writing, listening. Its primary goal is to improve communicative competence and to enable learners to handle a variety of immediate everyday situations related to academic life.

CEUS–T 614 Intermediate Kazakh II (3 cr.) P: Grade of B or higher in T613 or equivalent. Intermediate Kazakh's primary goal is to teach students to use Kazakh for everyday situations and purposes related to work and social life. Lessons are in Kazakh only, except some grammar analogues. Components include grammar structures, small texts, vocabulary, listening activities, and writing exercises.

CEUS–T 713 Advanced Kazakh I (3 cr.) P: Grade of B or higher in CEUS T 614 or equivalent. Advanced Kazakh I familiarizes students with key parts of life in contemporary Kazakhstan. While improving speaking, listening, reading and writing, students will also do occasional translations. Building on previous levels with stimulating and challenging activities, including listening to narratives, radio interviews, etc., students will forge accurate and fluent communication skills.

CEUS–T 714 Advanced Kazakh II (3 cr.) P: Grade of B or higher in T713 or equivalent. In Advanced Kazakh II we will keep introducing contemporary Kazakhstan, so students will have vocabulary to communicate according properly in different situations, purposes, and roles. Listening materials include narratives, radio interviews, "Cenasianet" language programs, Kazakh fiction, and newspapers. Teaching materials will be distributed in hand outs and copies.

CEUS–T 813 ADLS-Kazakh (3 cr.) P: Grade of B or higher in T714 or equivalent. In this class, students who have finished Advanced Kazakh II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Mongolian

CEUS–T 561 Introductory Mongolian I (3 cr.) Introductory Mongolian I introduces students to modern Mongolian in the Cyrillic script, introducing basic Mongolian pronunciation and grammar, along with knowledge of Mongolian culture and traditions. By the end of the semester, students can conduct everyday conversations and use Mongolian's main cases and verb tenses in conversation and writing.

CEUS–T 562 Introductory Mongolian II (3 cr.) P: Grade of B or higher in T561 or equivalent. In this course, we expand the competencies already mastered in Introductory Mongolian I. By the end of the semester students can use the main cases and finite verb tenses, as well as some modals (converbs) and simple compound sentences. Students also learn about Mongolian culture by reading simple folk tales.

CEUS–T 661 Intermediate Mongolian I (3 cr.) P: Grade of B or higher in T562 or equivalent. This course expands the basic Mongolian conversation, grammar, reading and writing skills mastered in first year. The most useful kinds of compound and complex sentences of Mongolian are introduced and skills developed to use them in conversation and writing. Students also learn more about Mongolian culture and traditions.

CEUS–T 662 Intermediate Mongolian II (3 cr.) P: Grade of B or higher in T661. This course expands the basic Mongolian conversation, grammar, reading and writing skills introduced in the first semester. Students master the most useful kinds of compound and complex sentences of Mongolian and voice infixes in conversation and writing. Students also learn more about Mongolian culture and traditions.

CEUS–T 761 Advanced Mongolian I (3 cr.) P: Grade of B or higher in T662 or equivalent. Students first review compound and complex sentences and then develop a sense of Mongolian literary style through the reading of diverse materials. In-class oral presentations, discussions, and role-plays help students to increase their fluency. Students are introduced to translation, and their knowledge of Mongolian culture and history is enhanced.

CEUS–T 762 Advanced Mongolian II (3 cr.) P: Grade of B or higher in T761 or equivalent. Class objectives are: 1) develop a sense of Mongolian literary style through reading diverse materials; 2) improve fluency by oral presentations, class discussions, and role-playing; 3) Practice formal translation using internet and newspaper materials; 4) develop knowledge of Mongolian culture and literary history.

CEUS–T 663 Classical Mongolian I (3 cr.) Introduction to Classical Mongolian and its relation to the living spoken languages and dialects. Topics include the Mongolian vertical script, its origin, graphemes and allographs, vowel and consonantal graphemes, orthography, punctuation, numbers, a skeletal grammar, word formation, syntax. Format is reading, analyzing, and translating texts in transcription and original script.

CEUS–T 664 Classical Mongolian II (3 cr.) P: Classical Mongolian I. Reading and interpreting various old and new Classical Mongolian texts in Uyghur script, grammatical analysis and translation into Modern Mongolian and English.

CEUS–T 861 ADLS-Mongolian (3 cr.) P: Grade of B or higher in T762 or equivalent. In this class, students who have finished Advanced Mongolian II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Pashto

CEUS–T 553 Introductory Pashto I (3 cr.) Introduces the Pashto language of Afghanistan. By practicing listening, speaking, reading, and writing, students are familiarized with the alphabet and sound system, basic structures and ordinary usage. By the end of the semester, the student will have mastered simple sentences and can ask and answer simple questions on familiar topics.

CEUS–T 554 Introductory Pashto II (3 cr.) P: Grade of B or higher in T553 or equivalent. Strengthens and improves skills gained in the previous semester. Students move into new topics such as personal information, daily activities, and expanded grammar structures. By the end of the course, the student will read simple prose texts, deal with everyday situations, and respond to requests on familiar topics.

CEUS–T 653 Intermediate Pashto I (3 cr.) P: Grade of B or higher in CEUS T554 or equivalent. Improves communicative skills to meet ordinary social situations and express interests and personal needs such as inquiring about one's surroundings, getting directions, buying food, going out to eat, etc. By the end, the student should be able to communicate and ask of questions about familiar topics using learned grammatical structures.

CEUS–T 654 Intermediate Pashto II (3 cr.) P: Grade of B or higher in T653 or equivalent. This class extends Pashto language skills, introducing materials on social interactions, current daily life, and culture. We build grammatical and lexical knowledge of learners with stimulating and challenging activities. By the end of the semester, students will converse confidently in routine tasks and social situations.

CEUS–T 753 Advanced Pashto I (3 cr.) P: Grade of B or higher in T654 or equivalent. Course materials relate to the Pashtunwali, customs, commerce, news channels in Afghanistan and more. Students will be able to participate in exchanges about work and home, converse on many familiar topics, narrate and describe in all time frames (present, future, and past), and read texts of medium complexity.

Persian

CEUS–T 551 Introductory Persian I (3 cr.) This class introduces basic communication skills in Modern Standard Persian and familiarizes students with Persian's sounds, alphabet, and basic grammar. Students will learn to read, write, speak, and comprehend simple to moderately complex sentences. Readings, class conversations, media programs, film viewing, and cultural activities will also introduce Persian culture.

CEUS–T 552 Introductory Persian II (3 cr.) P: Grade of B or higher in T551 or equivalent. This course continues Introductory Persian 1. While working further on basic sentence structure, we will develop greater fluency in pronunciation, reading, and writing. Our aim is a working vocabulary of 700 words; we will also begin studying compound verbs and other idiomatic expressions. Internet resources will be used extensively.

CEUS–T 651 Intermediate Persian I (3 cr.) P: Grade of B or higher in CEUS T552 or equivalent. Welcome to Intermediate Persian! After starting with a grammar review, we will cover a wide range of topics, and intermediate to advanced grammar.

CEUS–T 652 Intermediate Persian II (3 cr.) P: Grade of B or higher in CEUS T651 or equivalent. This course continues Intermediate Persian I, concentrating on complex grammatical structures and vocabulary acquisition. Emphasizing reading and writing skills, we will also work on fluency in modern colloquial pronunciation (Tehran dialect). We will study texts drawn from textbooks, modern Iranian publications and authentic materials, and Internet resources.

CEUS–T 751 Advanced Persian I (3 cr.) P: Grade of B or higher in T652 or equivalent. In this course, students will examine the classical Persian tradition's rich legacy of historical, literary, and religious writings. Students will learn the grammatical and lexical differences distinguishing classical from modern Persian, and will be introduced to basic research tools and reference works. Readings cover the range of classical Persian texts.

CEUS–T 752 Advanced Persian II (3 cr.) P: Grade of B or higher in T751 or equivalent. Advanced Persian II continues Advanced Persian I.

CEUS–T 659 Research in Classical Persian Texts (3 cr.) P: T652, its equivalent, or special permission of the instructor. The classical Persian tradition holds a distinguished place in human thought and culture. This course introduces aspects of that rich legacy. Students will learn what distinguishes classical Persian from modern, and master research tools and reference works. Readings taken from textbooks to reflect the range of classical Persian texts.

CEUS–T 851 ADLS-Persian (3 cr.) P: Grade of B or higher in T752 or equivalent. In this class, students who have finished Advanced Persian II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Tajik

CEUS–T 515 Introductory Tajik I (3 cr.) This course introduces the language and culture of the Tajiks of Tajikistan and Uzbekistan. You will learn enough Tajii to greet people, maintain simple conversations, handle basic survival needs, read signs, and short narratives, and fill out a form or take a message. You will also learn about Tajikistan.

CEUS–T 516 Introductory Tajik II (3 cr.) P: Grade of B or higher in T515 or equivalent. Introductory Tajik II continues and expands what is learned in Introductory Tajik I.

CEUS–T 615 Intermediate Tajik I (3 cr.) P: Grade of B or higher in T516 or equivalent. Intermediate Tajik follows the communicative approach, enabling learners to interact successfully in everyday and workplace situations. Authentic Tajik language materials used include videos and audio-taped materials, and printed texts. Focused drills present grammatical structures; explanations and paradigms are minimized. Materials also familiarize students about life for Tajiks.

CEUS–T 616 Intermediate Tajik II (3 cr.) P: Grade of B or higher in CEUS T615 or equivalent. Intermediate Tajik II continues and expands what is learned in Intermediate Tajik I.

Tibetan

CEUS–T 571 Introductory Tibetan I (3 cr.) Introductory Tibetan I introduces Tibetan language basics to students with no previous background. We will begin speaking, listening, reading and writing. We cover the basic grammar, build vocabulary, and develop idiomatic usage needed in everyday communication. The course will also introduce learners to Tibetan culture and daily life.

CEUS–T 572 Introductory Tibetan II (3 cr.) P: Grade of B or higher in T571 or equivalent. Introductory Tibetan II is a further introduction to the basics of Tibetan language. While expanding the competencies developed in the previous semester, students receive daily written, reading and audio home assignments. Conversation preparation is also required. We also have coffee hours to enable students to talk to Tibetan native speakers.

CEUS–T 671 Intermediate Tibetan I (3 cr.) P: Grade of B or higher in T572 or equivalent. Intermediate Tibetan further develops the students' ability to use Tibetan language for meaningful communication. Speaking, listening, reading and writing skills are developed throughout the course with due attention to grammar. Special attention is devoted to classical Tibetan readings.

CEUS–T 672 Intermediate Tibetan II (3 cr.) P: Grade of B or higher in T671 or equivalent. Intermediate Tibetan II is mainly aimed at the further development of the students' abilities with basic features of Tibetan language. In addition to the textbook, other materials such as short stories, articles etc., will be used for students' daily writing and reading assignments.

CEUS–T 771 Advanced Tibetan I (3 cr.) P: Grade of B or higher in T672 or equivalent. Advanced Tibetan I helps students acquire advanced skills in an academic and professional manner. Students expand their knowledge of grammar with reading and composition exercises, and translate general texts from Tibetan into English. The course will focus on reading in modern and classical Tibetan.

CEUS–T 772 Advanced Tibetan II (3 cr.) P: Grade of B or higher in T771 or equivalent. This course will further develop advanced skills desirable for academic and professional work. The materials are selected from writings and translations of classical and modern Tibetan. Daily writing and translation assignments. Knowledge of Tibetan culture and history also taught.

CEUS–T 573 Practical Tibetan (3 cr.) P: Grade of B or higher in T572 or equivalent. This course offers continuing study in Tibetan classical and modern languages. Materials include instructor's handouts, audio-visual materials, books and online materials such as from the Tibetan and Himalayan Digital Library (www.thdl.org) will be used for language teaching purposes. Open to students who have completed Introductory to Advanced Tibetan language.

CEUS–T 673 Old Tibetan (3 cr.) Introduction to the earliest known form of the Tibetan language, from 649 to 975 A.D. There is a vast, but little known corpus of material written in Old Tibetan. This practical and philological introduction covers Old Tibetan phonology, morphology, and syntax, and introduces the comparative-historical study of Tibetan.

CEUS–T 674 Amdo Dialect Tibetan (3 cr.) This course introduces basic communication skills in the Tibetan Amdo Dialect, spoken in Tibet's Amdo region and parts of Kham. Course materials include instructor's handouts, audio-visual materials, books and online materials such as those from the Tibetan and Himalayan Digital Library (www.thdl.org).

CEUS–T 676 Readings in Modern Tibetan Texts (3 cr.) This course allows students interested in the modern Tibetan language to improve their skills in handling literary Tibetan materials and documents produced in Tibetan areas of the PRC and in exile.

CEUS–T 871 ADLS-Tibetan (3 cr.) P: Grade of B or higher in T772 or equivalent. In this class, students who have finished Advanced Tibetan II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Turkish

CEUS–T 581 Introductory Turkish I (3 cr.) Introductory Turkish I introduces English-speaking students to Turkish. Students build basic proficiency in modern Turkish and communicate at beginner's level in everyday situations. Listening, speaking, reading, and writing are covered in classroom activities and at-home practice and a sound linguistic and cultural foundation is laid for future studies of Turkish.

CEUS–T 582 Introductory Turkish II (3 cr.) P: Grade of B or higher in T581 or equivalent. Introductory Turkish II continues Introductory Turkish I, expanding at a higher level basic competencies previously mastered. Students develop communicative skills as they assimilate the basics of Turkish grammar. In addition to the textbook, we use other media such as short video clips from Turkish television, songs, and newspaper articles.

CEUS–T 681 Intermediate Turkish I (3 cr.) P: Grade of B or higher in T582 or equivalent. Intermediate Turkish I expands the communicative skills, grammar and vocabulary skills mastered in Introductory Turkish. Class activities and homework involve listening, speaking, reading and writing. Special attention paid to building

richer vocabulary, developing competence in the vernacular, and improving reading. Recordings, films, handicrafts, and cartoons used in context.

CEUS–T 682 Intermediate Turkish II (3 cr.) P: Grade of B or higher in T681 or equivalent. Intermediate Turkish II continues Intermediate Turkish I.

CEUS–T 781 Advanced Turkish I (3 cr.) P: Grade of B or higher in T682 or equivalent. Advanced Turkish is based on authentic materials such as watching Turkish TV news via Oncourse, and writing a report on it. All language skills (listening, speaking, reading, and writing) are improved in class activities. At coffee hours students can interact with native speakers in a friendly environment.

CEUS–T 782 Advanced Turkish II (3 cr.) P: Grade of B or higher in T781 or equivalent. Advanced Turkish II is a fun way to learn Turkish, with new and improved materials and an interactive method. Instruction is based on authentic materials, such as Turkish TV via Oncourse. At coffee hours students can interact with native speakers in a friendly environment.

CEUS–T 685 Introductory Ottoman Turkish I (3 cr.) The first semester focuses on the Arabic script as used in Ottoman. Relevant Arabic and Persian grammar will be incorporated into the lectures and exercises. We will read and analyze (morphology and syntax) twentieth-century printed Ottoman texts. Course structure adjusted according to students' level as determined by ACTFL assessment.

CEUS–T 686 Introductory Ottoman Turkish II (3 cr.) Introductory Ottoman Turkish II continues Introductory Ottoman Turkish I, and prepares students for a smooth transition toward reading authentic printed Ottoman materials. Semester concludes with an introduction to manuscripts. The course emphasizes reading, but writing not neglected. Relevant Arabic and Persian grammar incorporated into lectures and exercises.

CEUS–T 687 Advanced Ottoman Turkish I (3 cr.) The course is designed to train students in deciphering and understanding advanced level Ottoman literary sources. These include poetry collections, biographies of poets, travel literature, and hagiographic manuscripts and other Ottoman sources of Islam. Students will also be introduced to major scholarly figures, theories, secondary, and especially primary sources.

CEUS–T 688 Advanced Ottoman Turkish II (3 cr.) In addition to deciphering texts, the course will focus on genealogies of the historical Turkish lexicon. Instructor will guide the students throughout the semester in developing these skills by providing them with hundreds of examples, and the scholarly tools and methodologies that are fundamental in historicizing Turkish words and suffixes.

CEUS–T 785 Media Turkish I (3 cr.) P: Advanced Turkish or permission of instructor. It addresses the needs of students of Turkish in coping with the linguistic and cognitive difficulties associated with media language. It improves students' linguistic skills for better comprehension of the contemporary language as manifested in the Turkish media. Up-to-date socio-political issues associated with these texts will also be discussed.

CEUS–T 786 Media Turkish II (3 cr.) P: Grade of B or better in T785 or equivalent. As opposed to "Media Turkish I" whose focus was reading comprehension, "Media Turkish II" centers around oral comprehension. Authentic materials from the Turkish media are incorporated into the teaching schedule in an effort to help students develop their listening comprehension skills. The instructor provides the current TV recordings via satellite.

CEUS–T 881 ADLS-Turkish (3 cr.) P: Grade of B or higher in T782 or equivalent. In this class, students who have finished Advanced Turkish II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Turkmen

CEUS–T 517 Introductory Turkmen I (3 cr.) Introductory Turkmen enables learners to interact successfully in everyday and workplace situations in the target language and culture at a proficiency level of 1 (ILR guidelines). Authentic Turkmen language materials - video- and audio-taped materials, printed texts - are used throughout. Grammatical structures are presented within focused drills.

CEUS–T 518 Introductory Turkmen II (3 cr.) P: Grade of B or higher in CEUS T517 or equivalent. Introductory Turkmen II continues Introductory Turkmen I.

CEUS–T 617 Intermediate Turkmen I (3 cr.) P: Grade of B or higher in CEUS T518 or equivalent. Intermediate Turkmen follows the communicative approach, enabling learners to interact successfully in everyday and workplace situations. Authentic Turkmen language materials used include videos and audio-taped materials, and printed texts. Focused drills present grammatical structures; explanations and paradigms are minimized. Newspaper materials update project materials on Turkmenistan's changing life.

CEUS–T 618 Intermediate Turkmen II (3 cr.) P: Grade of B or higher in CEUS T617 or equivalent. Intermediate Turkmen II continues Intermediate Turkmen I.

Uyghur

CEUS–T 531 Introductory Uyghur I (3 cr.) Introductory Uyghur I introduces basic Uyghur language: the Uyghur script, phonetic rules, and basic grammar of the literary Uyghur language. Students also learn about Uyghur lifestyle, society and culture. Daily class activities involve: conversations; pronunciation, vocabulary, and grammar exercises; simple dialogues and texts. Considerable independent preparation outside of class required.

CEUS–T 532 Introductory Uyghur II (3 cr.) P: Grade of B or higher in T531 or equivalent. Introductory Uyghur II continues Introductory Uyghur I. Students will develop their skills in listening, reading, speaking and writing, to begin mastering literary Uyghur language. Uyghur audio and video cassettes and visuals illustrate contemporary Uyghur cultural life. Opportunity for personal expression comes in partner and group work.

CEUS–T 631 Intermediate Uyghur I (3 cr.) P: Grade of B or higher in T532. Intermediate Uyghur will expand the learner's grammatical, lexical, and functional skills. Listening activities involve narratives, interviews from RFA (Uyghur Erkin Asiya Radiosi), Uyghur TV, etc. Partner

work and discussions are also used. Contemporary Eastern Turkestan's society will be introduced, so students can communicate properly in different situations, purposes, and roles.

CEUS–T 632 Intermediate Uyghur II (3 cr.) P: Grade of B or higher in T631 or equivalent. Intermediate Uyghur II is much like Intermediate Uyghur I. While developing skills, we will introduce contemporary Eastern Turkestan, its culture and mentality, so students may communicate effectively. Also included: translation skills, partner work and discussions, authentic listening and video material. Independent work out of class is an essential part.

CEUS–T 731 Advanced Uyghur I (3 cr.) P: Grade of B or higher in CEUS T632. In Advanced Uyghur I students will give oral, reading, and writing presentations, participate in class discussions, and practice translation. Excerpts from novels, movies, newspapers, etc., will develop knowledge of Uyghur culture. Students will need a strong drive to contribute to the whole class as well as individual meetings.

CEUS–T 732 Advanced Uyghur II (3 cr.) P: Grade of B or higher in CEUS T731. In Advanced Uyghur II students will give oral, reading, and writing presentations, participate in class discussions, and practice translation. Excerpts from novels, movies, newspapers, etc., will develop knowledge of Uyghur culture. Students will need a strong drive to contribute to the whole class as well as individual meetings.

CEUS–T 831 ADLS-Uyghur (3 cr.) P: Grade of B or higher in T732 or equivalent. In this class, students who have finished Advanced Uyghur II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Uzbek

CEUS–T 511 Introductory Uzbek I (3 cr.) Introductory Uzbek I introduces Uzbekistan's literary language, using Latin and Cyrillic alphabets. Conversation, reading practice, journal writing, newspapers illustrating modern Uzbekistan, Uzbek videos, TV programs, and audio tapes will be used. Students will use Oncourse and email to print out teaching materials and to turn in their assignments.

CEUS–T 512 Introductory Uzbek II (3 cr.) P: Grade of B or higher in T511 or equivalent. Introductory Uzbek II continues Introductory Uzbek I.

CEUS–T 611 Intermediate Uzbek I (3 cr.) P: Grade of B or higher in T512 or equivalent. Intermediate Uzbek increases students' fluency in speaking and develops listening and reading skills. With extensive conversation and reading practice, students extend their vocabulary and grammar fundamentals in the literary language of Uzbekistan. Journals, newspapers and authentic materials supplied via Internet, e-mail and Oncourse illustrate modern life and language in Uzbekistan.

CEUS–T 612 Intermediate Uzbek II (3 cr.) P: Grade of B or higher in T611 or equivalent. Intermediate Uzbek II continues Intermediate Uzbek I.

CEUS–T 711 Advanced Uzbek I (3 cr.) P: Grade of B or higher in T612 or equivalent. Advanced Uzbek I increases oral fluency, and develops listening, reading and writing, based on literary Uzbek, to enable students to do research in history, culture, politics, etc. We do extensive conversation and reading practice, using journals and newspapers illustrating modern Uzbekistan, Internet websites, Oncourse, videos, TV programs and audio tapes.

CEUS–T 712 Advanced Uzbek II (3 cr.) P: Grade of B or higher in T711 or equivalent. Advanced Uzbek II increases oral fluency, and develops listening, reading and writing, to enable students to do research in history, literature, and culture. We do extensive conversation and reading practice, using newspapers and journals illustrating Uzbek history, literature, and modern life, plus Uzbek videos, TV programs, and audio tapes.

CEUS–T 811 Advanced Directed Language Study-Uzbek (3 cr.) P: Grade of B or higher in T712 or equivalent. In this class, students who have finished Advanced Uzbek II may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal specifying instructor, materials to be studied, and a methodology for improving language skills. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

General

CEUS–T 690 Introduction to Manchu (3 cr.) The aim of this course is to provide a comprehensive, basic knowledge necessary for the understanding of Manchu texts. The course will be divided into two main parts: (1) study of Manchu phonology, morphology, and syntax; (2) translation of selected Manchu readings.

CEUS–T 691 Old Turkic (3 cr.) This introduces Old Turkic texts (8th to 14th century) in nine scripts: 1) runiform; 2) Sogdian; 3) Uyghur; 4) Brahmi; 5) Syriac; 6) Manichean; 7) Chinese characters; 8) Square ('Phags-pa) Script; and 9) Tibetan script. The course also covers the Turkic language of the Karakhanid Empire (also called Middle Turkic).

CEUS–T 692 Introduction to Evenki (3 cr.) This course introduces Evenki, a historically important but now endangered language of the Tungusic family, spoken in Siberia and northeastern inner Mongolia. The linguistic position of Evenki, the history of its study, phonetics, grammar, and writing systems are all introduced and students will learn how to translate brief texts.

CEUS–T 693 Introduction to Sakha (Yakut) (3 cr.) Sakha (formerly called Yakut) is a northern Turkic language, with many ancient Mongolian loan words. It is one of Siberia's most vigorous indigenous languages. This course provides a comprehensive, basic knowledge necessary for the understanding of Yakut texts in the modern Cyrillic script and in earlier transcriptions.

CEUS–T 694 Uralic Linguistics (3 cr.) Covers linguistics of the Uralic language family (Hungarian, Finnish, Estonian, and other languages in Russia). We begin with the proto-Uralic and relationships among Uralic languages. The main focus is on topics such as agglutination, vowel harmony, complex locative case systems. The final topic: sociolinguistics of Uralic languages in Russia.

CEUS–T 698 Intermediate Central Eurasian Languages I (3 cr.) P: Grade of B or above in two semesters of introductory-level of the same language or equivalent. This variable titles class is used for fall semester of intermediate-level modern language classes which do not y et have their own number. Such languages will be Uralic; Altaic; Iranian; or Tibeto-Burman languages of the Tibetan Plateau-Himalayas region. Students may not use more than one such language for departmental degree requirements.

CEUS–T 699 Intermediate Central Eurasian Languages II (3 cr.) P: Grade of B or above in one semester of intermediate-level of the same language or equivalent. This variable titles class is used for spring semester of intermediate-level modern language classes which do not yet have their own number. Such languages will be Uralic; Altaic; Iranian; or Tibeto-Burman languages of the Tibetan Plateau-Himalaya region. Students may not use more than one such language for departmental degree requirements.

CEUS–T 798 Advanced Central Eurasian Languages I (3 cr.) P: Grade of B or above in two semesters of intermediate-level of the same language or equivalent. This variable titles class is used for fall semester of advanced-level modern language classes which do not yet have their own number. Such languages will be Uralic; Altaic; Iranian; or Tibeto-Burman languages of the Tibetan Plateau-Himalayas region. Students may not use more than one such language for departmental degree requirements.

CEUS–T 799 Advanced Central Eurasian Languages II (3 cr.) P: Grade of B or above in one semester of advanced-level of the same language or equivalent. This variable titles class is used for spring semester of advanced-level modern language classes which do not yet have their own number. Such languages will be Uralic; Altaic; Iranian; or Tibeto-Burman languages of the Tibetan Plateau-Himalayas region. Students may not use more than one such language for departmental degree requirements.

CEUS–T 891 ADLS-Central Eurasian Languages (3 cr.) P: Grade of B or above in highest regularly offered level of language or equivalent. For students who have finished the highest regularly offered level in a CEUS language (except when an ADLS class already exists) may continue language learning in topic areas of interest. Students submit to the IAUNRC a proposal. Enrollment is contingent upon receiving an ADLS grant from the IAUNRC.

Chemical Physics

College of Arts and Sciences

Departmental E-mail: gradphys@indiana.edu

Departmental URL: www.chemphys.indiana.edu

Curriculum

Degree Offered

Doctor of Philosophy. A student may also qualify for the Master of Science degree in chemistry or physics.

Special Program Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree

Admission Requirements

Undergraduate degree in chemistry, physics, or mathematics. Students who have interests in the physical sciences with undergraduate degrees in other fields, such as engineering, are also encouraged to apply; they will be considered on an individual basis. Admission to the program requires that the student first be admitted to the graduate program in chemistry or physics.

Grades

B (3.0) average or higher must be maintained.

Course Requirements

These requirements are flexible, and are planned and approved by the Chemical Physics Committee and the individual student. The guidelines in planning the curriculum are that the student in the program should acquire knowledge of condensed-matter physics, electricity and magnetism, molecular structure, kinetics, atomic and molecular spectroscopy, quantum mechanics, and statistical mechanics. The formal requirements are either those of a major in physical chemistry with a minor in physics or of a major in physics with a minor in chemistry.

Minor

For a minor in physics, 9 credit hours in physics courses at the P501 level or higher are required. For a minor in chemistry, 6 credit hours are required, chosen from the following: C561-C562, C566, C567-C568, C668. Occasionally, courses other than those listed here may be accepted, but such substitutions require approval of the Chemical Physics Committee.

Major

See Ph.D. program descriptions listed under chemistry or physics.

Qualifying Examination

See requirements of the major department, found elsewhere in this bulletin.

Dissertation

Under the direction of a graduate faculty member of the Department of Chemistry or the Department of Physics.

Final Examination

Usually oral, covering dissertation, major, and minor(s).

Faculty

Co-Directors

Professors David Baxter* (Physics), Romualdo de Souza* (Chemistry)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor’s Professor

George Ewing* (Emeritus, Chemistry)

Distinguished Professors

Gary Hieftje* (Chemistry), Peter Ortoleva* (Chemistry), Charles Parmenter* (Chemistry), Victor Viola* (Emeritus, Chemistry)

Robert and Marjorie Mann Chairs

David Clemmer* (Chemistry), Gary Hieftje* (Chemistry), Martin Jarrold* (Chemistry)

Professors

Adam Allerhand* (Emeritus, Chemistry), David Baxter* (Physics), Russell Bonham* (Emeritus, Chemistry), Romualdo de Souza* (Chemistry), Herb Fertig* (Physics), Stanley Hagstrom* (Emeritus, Chemistry, Computer Science), Larry Kesmodel* (Physics), Lawrence Montgomery* (Emeritus, Chemistry), Gerardo Ortiz* (Physics), Roger Pynn* (Physics), Krishnan Raghavachari* (Chemistry), James Reilly* (Chemistry), William Schaich* (Emeritus, Physics), Paul Sokol* (Physics), Philip Stevens* (Public and Environmental Affairs), James Swihart* (Emeritus, Physics)

Associate Professors

Mu-Hyun Baik* (Chemistry), John Carini* (Physics), Bogdan Dragnea* (Chemistry), Srinivasan Iyengar* (Chemistry), Stephen Jacobson* (Chemistry), C. Chick Jarrold* (Chemistry), Dongwhan Lee* (Chemistry), Daniel Mindiola* (Chemistry)

Assistant Professors

Lane Baker* (Chemistry), Dobrin Bossev* (Physics), Amar Flood* (Chemistry), Liang-Shi Li* (Chemistry), Sara Skrabalak* (Chemistry), Steven Tait* (Chemistry)

Graduate Advisors

Professor David Baxter*, Swain West 128, (812) 855-8337; Professor Romualdo de Souza*, Chemistry C230A, (812) 855-3767

Chemistry

College of Arts and Sciences
Curriculum

Degrees Offered

Master of Science, Master of Arts for Teachers, and Doctor of Philosophy. The department also participates in the biochemistry, chemical physics, and molecular and cellular biology programs.

Fields of Study

Analytical, biological, inorganic, materials, organic, and physical chemistry.

Special Department Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Undergraduate degree in chemistry, physics, mathematics, or the biological sciences. Students with undergraduate degrees in other areas of the physical sciences or engineering are also encouraged to apply. Students are admitted to the program only with the approval of the Chemistry Graduate Admissions Committee.

Grades

At least a B (3.0) average in work for the advanced degree. Grades below C (2.0) are not counted toward the completion of degree requirements, but will be counted in determining a student's grade point average.

Master of Science Degree

This degree may be conferred upon the holder of a bachelor's degree or master's degree in another discipline.

Course Requirements

These requirements are flexible and are planned and approved by the graduate committee. A minimum of 30 credit hours in chemistry are required. At least 9 credit hours of course work in the major field offered in fulfillment of the M.S. degree must be in courses numbered 500 or above (excluding thesis work).

Thesis

Required.

Master of Arts for Teachers Degree

The M.A.T. program permits a secondary school teacher with minimum training in chemistry to achieve certification for the teaching major in chemistry in the secondary school. Teachers already holding such certification may strengthen their training by taking advanced lecture and laboratory work in chemistry. Students with B.A. or B.S. degrees in chemistry, but with no education courses, may complete requirements for a secondary Indiana teaching certificate and strengthen their chemistry training.

Admission Requirements

Eighteen (18) credit hours of chemistry, including one semester each of general, quantitative, and organic chemistry. Deficiencies must be removed without graduate credit. Continuance in the program will depend upon the results received in courses taken during the first semester of summer in the program; alternatively, a qualifying examination may be administered after either one semester or one summer in the program.

General Requirements

A total of 36 credit hours, of which a minimum of 20 credit hours must be in courses in chemistry that carry graduate credit. A maximum of 6 credit hours of undergraduate courses may be applied toward the M.A.T. degree. For a student having an unusually strong undergraduate background in chemistry or biochemistry (e.g., a B.S. degree), some of the required 20 credit hours in advanced chemistry courses may be in other areas of science and mathematics, if approved in advance by the graduate advisor. A student completing the requirements for the M.A.T. degree in chemistry must also have met the requirements for certification for a teaching major in science in the secondary school. Consult Education Student Services (Wright Education Building 1064, [812] 856-8511) for details.

Lecture-Course Requirements

Twelve (12) credit hours, distributed as follows: 6 credit hours in one of the following six fields: analytical, biological, inorganic, materials, organic, or physical chemistry; and 3 credit hours in each of two of the remaining four fields. Lecture courses may be selected from those at the 500 level or above and from any of the

following undergraduate courses: analytical, A314, A318; biological, C481, C483, C484, C485; inorganic, C430; organic, C342, S342, C443; physical, C360, C361, S361, C362, S362, C460.

Laboratory-Course Requirements

Two (2) credit hours chosen so that the student's total background in advanced laboratory courses will include credit in three different fields. The following, and comparable courses taken elsewhere, will qualify: A315, C344, S344, P364, C437, P464, C487.

Electives

Additional courses in chemistry at the 400 level or above to give a total of at least 20 credit hours (including course work in the preceding two categories). Up to 16 credit hours in courses at the 300 level or above in mathematics, biological sciences, physical sciences, or education carrying graduate credit.

Final Examination

Either oral or written, or both.

Master of Library Science/Master of Information Science Degree Information Specialist (Chemistry)

Offered by the School of Library and Information Science (SLIS). Students in this joint program receive the Master of Library Science degree or the Master of Information Science degree, and are certified as information specialists in chemistry.

Admission Requirements

Bachelor's degree in chemistry or the equivalent.

Course Requirements: M.I.S.

Foundation and Specialization course requirements (15 credit hours); and as electives courses L570, L624, and additional courses to total at least 36 credit hours. Additional courses are to be chosen in consultation with advisors in SLIS and Chemistry to bring the total graduate credit hours to 42.

Course Requirements: M.L.S.

Foundation courses (15 credit hours); and as electives courses L570, L624, and additional SLIS courses to total at least 30 credit hours. The additional courses are to be chosen in consultation with advisors in SLIS and Chemistry to bring the total graduate credit hours to 36.

Doctor of Philosophy Degree

The program leading to the Ph.D. degree emphasizes the attainment of a high level of competency in a specialized area of chemistry, but also requires the development of broad knowledge and experience. By the time the degree is earned, the student should show promise of becoming a capable and independent investigator in chemistry. The major emphasis for the Ph.D. is on research while in residence on the Bloomington campus. Research should be the student's greatest challenge and the focus of the major portion of his or her energy. The student's attitude toward and progress in research is a most important factor in graduate committee decisions.

Course Requirements

A total of 90 credit hours, of which at least 24 credit hours must be in course work. Students may major in analytical, biological, inorganic, materials, organic, or physical chemistry. Doctoral students majoring in a field of chemistry are required to complete a minimum of 12 credit hours of course work in that field, following a sequence of courses approved by their advisory committee.

A doctoral student in chemistry can choose to minor within the Chemistry department or can elect to minor in some other department. In the latter case, the requirements are specified by the minor department. Students electing to minor within the department must complete a minimum of 6 credit hours in areas of chemistry other than the major area. The course work comprising an inside minor must be approved by the advisory committee.

All doctoral students in chemistry are required to enroll in C500 Introduction to Research during their first year of study.

Foreign-Language/Tool-Skill Requirement

The department has no formal foreign language or tool-skill requirement, but Ph.D. advisory committees may consider such courses essential for individual students.

Qualifying Examinations

To remain in good standing, each student must successfully complete the Chemistry seminar course in the chosen major (A800, B800, M800, N800, R800, or P800) during the third and fourth semester, and present a literature seminar by the end of the second year. In the fifth semester, students meet with their advisory committees to review past performance in both the major and minor areas and to evaluate plans for completing the Ph.D. This review includes a seminar, written document, and oral examination. Current information concerning probation, termination, and reinstatement policies may be obtained from the departmental graduate office.

Final Examination

Usually oral, covering dissertation, major, and minors, and also a seminar describing the dissertation.

Ph.D. Minor in Chemistry

Students from other departments who wish to minor in chemistry must complete at least 6 credit hours of graduate course work in chemistry with an average of B (3.0) or above.

Faculty

Chairperson

Professor David P. Giedroc*

Departmental E-mail: chemgrad@indiana.edu

Departmental URL: www.chem.indiana.edu

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professor

George Ewing* (Emeritus)

Harry G. Day Chair

David R. Williams*

Robert and Marjorie Mann Chairs

David E. Clemmer*, Gary M. Hieftje*, Martin Jarrold*

Lilly Chemistry Alumni Chair

Milos Novotny*

Distinguished Professors

Kenneth G. Caulton*, Ernest Davidson* (Emeritus), Gary M. Hieftje*, Ronald Hites* (Public and Environmental Affairs), Milos V. Novotny*, Peter J. Ortoleva*, Charles S. Parmenter* (Emeritus), Victor E. Viola* (Emeritus)

Herman T. Briscoe Professor

Dennis G. Peters*

Standiford H. Cox Professor

Richard D. Di Marchi*

Professors

Adam Allerhand* (Emeritus), Russell Bonham* (Emeritus), Ernest Campaigne (Emeritus), Marvin Carmack (Emeritus), Jack Crandall* (Emeritus), Romualdo T. de Souza*, Joseph Gajewski* (Emeritus), David P. Giedroc*, Stanley Hagstrom* (Emeritus, Computer Science), W. Terry Jenkins* (Emeritus, Biochemistry and Molecular Biology), Lawrence K. Montgomery* (Emeritus), Krishnan Raghavachari*, James P. Reilly* John Richardson* (Emeritus, Biochemistry), V. Jack Shiner Jr.* (Emeritus), Philip S. Stevens* (Public and Environmental Affairs), Lee Todd* (Emeritus), Theodore S. Widlanski*, Jeffery M. Zaleski*

Associate Professors

Mu-Hyun Baik* (Informatics), Bogdan G. Dragnea*, Srinivasan S. Iyengar*, Stephen Jacobson*, Caroline Chick Jarrold*, Dongwhan Lee*, Daniel J. Mindiola*, Martha Gray Oakley*, Michael VanNieuwenhze*

Senior Scientists

Lyudmila Bronstein, John Huffman* (Emeritus)

Assistant Professors

Zachary Aron*, Lane Baker*, Erin E. Carlson*, Silas Cook, Charles Dann III*, Amar Flood*, Liang-shi Li*, Sara E. Skrabalak*, Steven L. Tait*

Graduate Advisors

Caroline Chick Jarrold, Chemistry Building C121, (812) 855-2069

Courses

CHEM–C 315 Chemical Measurements Laboratory I (3 cr.)

CHEM–C 317 Equilibria and Electrochemistry (2 cr.)

CHEM–C 318 Spectrochemistry and Separations (2 cr.)

CHEM–C 341 Organic Chemistry I Lectures (3 cr.) **N&M** P: C117 or C106. Chemistry of carbon compounds. Nomenclature; qualitative theory of valence; structure and reactions. Syntheses and reactions of major classes of monofunctional compounds. Credit given for only one of C341, S341, or R340.

CHEM–C 342 Organic Chemistry II Lectures (3 cr.) P: C341. Syntheses and reactions of polyfunctional compounds, natural and industrial products; physical and chemical methods of identification. Credit given for only one of C342, S342 or R340.

CHEM–C 343-344 Organic Chemistry Laboratory I-II (2-2 cr.)

CHEM–C 360 Introductory Physical Chemistry (3 cr.) **N&M** P: C117 or C106; N330 strongly recommended, MATH M119, PHYS P201; or equivalents. Elements of thermodynamics, reaction kinetics, molecular quantum states, and spectroscopy. For students not intending to specialize in physical sciences. Credit given only for C360, C361/C362, or S361/S362.

CHEM–C 361 Physical Chemistry of Bulk Matter (3 cr.) **N&M** P: C117 or C106; N330 strongly recommended, MATH M212 or M216, and PHYS P202 or P222. Thermodynamics laws, free energy and chemical potentials, gases and dilute solutions, phase transitions, colligative properties, chemical equilibria, ionic solutions, chemical kinetics and transport processes, current topics. Credit given for only one of the following: C361, S361, or C360. I Sem.

CHEM–C 362 Physical Chemistry of Molecules (3 cr.) **N&M** P: C117 or C106; N330 strongly recommended, MATH M212 or M216, and PHYS P202 or P222.

CHEM–S 362 Physical Chemistry of Molecules, Honors (3 cr.)

CHEM–C 364 Introduction to Basic Measurements (3 cr.)

CHEM–C 405 Principles of Chemistry (1–3 cr.) For teachers of high school chemistry; offered in summer session only.

CHEM–C 406 Lecture Demonstration Techniques in Chemistry (1–2 cr.) Nonmajors only.

CHEM–C 430 Inorganic Chemistry (3 cr.) P: C106 or C118, or S106 or S118, or N330 or S330, and C342 or S342. R: C362. Structure and bonding of inorganic compounds; survey of chemistry of nonmetal and metal elements, coordination compounds, organometallic compounds, mechanism and reactions.

CHEM–C 460 Nuclear Chemistry (3 cr.)

CHEM–C 472 Computer Sources for Chemical Information (1 cr.)

CHEM–C 483 Biological Chemistry (3 cr.) P: C342 or R340. R: Both C342 and N330 strongly recommended. Introduction to structure, chemical properties, and interrelationships of biological substances. Credit given for only one of C483 or C484-C485.

CHEM–C 484 Biomolecules and Catabolism (3 cr.)

CHEM–C 485 Biosynthesis and Physiology (3 cr.)

CHEM–C 500 Introduction to Research (2–6 cr.) Objectives and techniques of chemical research. Assignment to research problem to be completed during two semesters.

CHEM–C 501 Chemical Instrumentation (4 cr.) Electronics as applied to chemical instrumentation; design and construction of instruments used in chemical research, analysis, recording, and control; maintenance and practice in modification to meet special needs.

CHEM–C 502 Spectroscopic Methods in Inorganic Chemistry (3 cr.) P: C361. Chemical applications of group theory and the elucidation of structure and bonding in inorganic molecules and complexes by vibrational, nuclear magnetic resonance, Mossbauer and electronic absorption spectroscopy.

CHEM–C 503 Spectrometric Methods of Structure Determination (3 cr.) P: Graduate standing. Elucidation of molecular structure utilizing IR, UV, and NMR spectroscopy, mass spectrometry, and other methods.

CHEM–C 506 Biogeochemistry (3 cr.) The formation and processing of organic material in natural environments. Microbiology of sediments. The global biogeochemical cycles of carbon, nitrogen, and sulfur. Geochemistry of organic materials. Organic geochemical evidence of evolutionary events.

CHEM–C 509 Special Laboratory Problems (1–5 cr.) P: 8 credit hours of chemistry toward graduate degree, consent of instructor. P or C: 500-level lecture course in research field. Nonmajors only. Participation in scientific research to gain understanding of its philosophy and techniques.

CHEM–C 511 Advanced Analytical Methods I (4 cr.) Theory and practice of analytical separation techniques and analytical spectroscopy; chromatographic methods of separation, fundamentals of gas and liquid chromatography, overview of spectroscopic instrumentation, atomic and molecular spectroscopy for analysis.

CHEM–C 512 Advanced Analytical Methods II (4 cr.) Theory and practice of electrochemical (potentiometric and voltammetric) methods of analysis; introduction to analytical chemistry of the elements and statistics for analytical chemistry.

CHEM–C 540 Advanced Organic Chemistry (3 cr.) P: C362 and C342. Valence and molecule structure, electronic interpretation of organic reactions, stereochemistry.

CHEM–C 543 Organic Reactions (3 cr.) Synthesis of organic compounds, degradation reactions, selected topics in organic reactions.

CHEM–C 561 Atomic and Molecular Quantum Theory (3 cr.) P: Graduate standing or consent of instructor. Elements of quantum theory, solution of elementary problems with chemical applications, approximate methods, atomic structure, molecular symmetry and normal vibrations, the molecular orbital description of molecules.

CHEM–C 562 Computational Quantum Chemistry (3 cr.) P: C561 or consent of instructor. Electronic structure theory at the Hartree-Fock and semiempirical levels, computer calculations on elementary systems, elements of group theory and linear vector spaces, electron correlation, structure of potential surfaces.

CHEM–C 566 Molecular Optical Spectroscopy (3 cr.) P: C561 or consent of instructor. Interaction of radiation with matter. Spectroscopic probes of the rotational, vibrational, and electronic structure of molecules. Advanced laser methods.

CHEM–C 567 Chemical Statistical Mechanics (3 cr.) P: Graduate standing or consent of instructor. Introduction to equilibrium and nonequilibrium many-body systems using ensemble techniques. Emphasis on molecular systems and systems undergoing chemical transformation or transport. Both qualitative and rigorous approaches.

CHEM–C 568 Advanced Statistical Mechanics (3 cr.) P: C567 or consent of instructor. Selected topics such as pair correlation functions in classical liquids, laser and reaction-transport, nonequilibrium phenomena, critical phenomena, reaction rates, condensed media, NMR, precipitation and polymer kinetics, Green's function methods, and computational methods.

CHEM–C 572 Computational Chemistry and Molecular Modeling (3 cr.) P: C571 or consent of instructor. Molecular modeling: computer models of molecules and their behavior in gas and condensed phases; implicit and explicit solvation models; quantum and molecular mechanics; search strategies for conformational analysis, geometry optimization methods; information content from Monte Carlo and molecular dynamics simulations. Statistics and chemometrics: multivariate statistics and experimental design, numerical methods, calibration and chemical analysis, optimization methods, artificial intelligence. Molecular design: de novo design techniques; quantitative structure activity relationships (QSAR); comparative molecular field analysis (CoMFA); docking; molecular diversity and combinatorial libraries.

CHEM–C 581 Macromolecular Structure and Interaction (3 cr.) Principles of inter- and intromolecular interactions; structural stability of proteins and nucleic acids; thermodynamic and kinetic analysis of complex binding; experimental methods for analysis of macromolecular structure and binding. Credit given for only one of the following: C581, B503.

CHEM–C 582 Biomolecular Catalysis (3 cr.) Theory and analysis of biochemical catalysis; enzyme kinetics; cofactors; regulation of enzymatic reactions. Credit given for only one of the following: C582, B504.

CHEM–C 583 Analysis of Biochemical Literature (1.5 cr.) P: Concurrent or previous enrollment in B501/C584 or consent of instructor. Critical evaluation of the biochemical literature using selected papers as examples, development of written and oral communication skills in the context of literature analysis. Credit given for only one of the following: C583, C502.

CHEM–C 584 Integrated Biochemistry (3–4.5 cr.) P: Undergraduate biochemistry (equivalent to C483 or C484) or consent of instructor. Basic principles and methodologies of biochemistry: essentials of macromolecular biosynthesis; mechanism-based examination of biochemical aspects of cell biology; material is presented with an integrative approach design

to illustrate the interrelationship of biochemical processes. Credit given for only one of the following: C584, B501.

CHEM–C 585 Structure and Function of Biological Membranes (3 cr.) Biochemistry and biophysics of lipids, membranes, and membrane proteins; fundamentals of membrane transport; interfacial catalysis; transmembrane signal transduction. Credit given for only one of the following: C585, B605.

CHEM–C 587 Integrated Biochemistry II (1.5 cr.) P: C584 or consent of instructor. Mechanism-based examination of biochemical aspects of control protein folding and function, signal transduction, and systems biology. Credit given for only one of the following: C587, B506.

CHEM–C 611 Electroanalytical Chemistry (1.5–3 cr.) Theory and practice of electrochemical techniques (such as cyclic voltammetry, chronocoulometry, stripping analysis, thin-layer electrochemistry, and spectroelectrochemistry) used for analysis and for the characterization of inorganic and organic systems. (May be offered in alternate years.)

CHEM–C 612 Spectrochemical Methods of Analysis (1.5–3 cr.) New instrumentation and techniques employed in spectrochemistry; in-depth treatment of commonly used spectrochemical methods. (May be offered in alternate years.)

CHEM–C 613 Mass Spectrometry and Stable Isotopes (1.5–3 cr.) Topics in mass spectroscopic instrumentation and applications and in the natural chemistry of the stable isotopes of C, H, N, O, S, and rare gases. (May be offered in alternate years.)

CHEM–C 614 Chromatography (1.5–3 cr.) Theoretical and practical aspects of chromatographic methods of separation; fundamentals of gas and liquid chromatography, related instrumentation, and selected applications. (May be offered in alternate years.)

CHEM–C 615 Bioanalytical Chemistry (1.5–3 cr.) Survey of modern analytical techniques, including spectrochemical, electrochemical, and separation methods used in biochemical analysis and their applications. (May be offered in alternate years.)

CHEM–C 616 Surface Analysis and Surface Chemistry (1.5 cr.) An overview of the modern instrumental techniques of surface analysis will be presented, together with a survey of their applications to solve surface chemical problems. Topics include electron and ion spectroscopies, SIMS, LEED, thermal desorption spectroscopy, surface electron and ion microscopies, catalysis, microelectronics fabrication, and corrosion.

CHEM–C 619 Seminar: Analytical Chemistry (1 cr.) P: Consent of instructor. Individual student seminars covering new methods or applications of chemical analysis or characterization. Required of all analytical chemistry majors.

CHEM–C 630 Structure and Bonding (3 cr.) P: C502 and C561. Applications of quantum mechanics to the electronic and geometric structure of inorganic molecules. Advanced ligand field and molecular orbital theories. The Jahn-Teller effects and orbital symmetry studies of stereochemistry. Inorganic photochemistry. (May be offered in alternate years.)

CHEM–C 631 Chemical Crystallography (3 cr.) General understanding and hands-on laboratory experience in crystallography as analytical method. Topics will consist of theory on physics and mathematical concepts used in crystallography, the relation of physical and chemical properties to structure data, common databases, utilization of appropriate software for data work-up, solution, refinement, and visualization structures.

CHEM–C 632 Structure, Function, and Spectroscopy of Metal Ions in Biological Systems (3 cr.) Introduction to the field of bioinorganic chemistry and spectroscopic methods for determining structure/function relationship of metal ions in biology. Emphasis on oxygen carriers, metal ion transport and storage, as well as oxidoreductases involved in oxygen, hydrogen, and nitrogen metabolism. A discussion of electron transfer proteins, photosystems, and the role of metals in medicine will also be included.

CHEM–C 633 Inorganic Chemistry of Main Group Elements (3 cr.) The syntheses, structure, and industrial application of compounds and materials in which main group elements play a major role. All elements except the d-block transition metals are included as main group elements. This includes the f-block lanthanides and actinides as well.

CHEM–C 634 Transition Metal Chemistry (3 cr.) Survey of the properties of the transition metals with emphasis on common oxidation levels, coordination geometries, and compounds with “classical” ligands; “hard” and “soft” acids and bases; d-orbitals and their energies in different geometries; formation constants and the Chelate Effect; the Jahn-Teller theorem; low-, intermediate-, and high-spin systems; mixed valency; metal-ligand multiple bonding, metal-metal bonds; coordination clusters and their biological relevance.

CHEM–C 635 Mechanisms of Inorganic Reactions (3 cr.) Analysis of the experimental and theoretical basis for our understanding of the reactions associated with main group and transition metal ions and inorganic reagents in solution. Classes of reactions include ligand substitutions, redox reactions, electron transfer reactions, reactions within the coordination sphere of metal ions including catalysis by photochemical and electrochemical activation.

CHEM–C 636 Organometallic Chemistry and Catalysis (3 cr.) Synthesis and reactivity of organo-main group and transition metal compounds, including application to organic synthesis. Predictive principles and generic C-C and C-H bond-forming reactions, including hydrogenation, coupling, addition to olefins or alkynes, and metatheses. These reactions are also extended to reactions on surfaces and solid-state processes.

CHEM–C 637 Physical Methods in Structural Chemistry (3 cr.) Application of X-ray diffraction, dynamic NMR, and mass spectroscopy to structural and mechanistic problems throughout the periodic table, with emphasis on which techniques are optimal for particular questions, as well as the potential weaknesses of each.

CHEM–C 638 Seminar: Inorganic Chemistry (1–3 cr.) P: Consent of instructor. Topics not ordinarily covered by

regularly scheduled courses, such as boron hydrides, X-ray diffraction, metal-metal bonds, bioinorganic chemistry, platinum metals chemistry, inorganic photochemistry, etc. (May be offered in alternate years.)

CHEM–C 639 Characterization of Paramagnetic Molecules (3 cr.) Definitions of diamagnetism, paramagnetism, magnetization and magnetic susceptibility; the Curie Law; orbital angular momentum; the Van Vleck equation; zero-field splitting; exchange interactions in dinuclear and polynuclear metal clusters. Basic concepts of paramagnetic NMR; spin delocalization mechanisms and isotropic shifts; contact and dipolar contributions. EPR of transition complexes; g-value anisotropy as a function of coordination geometry.

CHEM–C 643 Organic Natural Products (3 cr.) P: C540 and C543; or consent of instructor. Synthesis and chemical-physical analysis of the structure of alkaloids, antibiotics, bacterial metabolites, plant pigments, steroids, and terpenes. (May be offered in alternate years.)

CHEM–C 644 Physical Organic Chemistry (1–3 cr.) P: C342 and C362. Application of physical-chemical techniques to the study of structure and mechanism of reaction of organic compounds.

CHEM–C 648 Seminar: Organic Chemistry (1–3 cr.) P: Consent of instructor. Recent developments in such areas as sulfur compounds, heterocycles, stereochemistry, polymers, and synthesis.

CHEM–C 668 Seminar: Physical Chemistry (1–3 cr.) P: Consent of instructor. Topics such as chemical applications of matrix algebra and group theory, digital computing techniques, solid state chemistry, high temperature processes, electrochemistry, theory of solutions, spectroscopy, and surface chemistry.

CHEM–C 681 Advanced Protein Biosynthesis and Processing (1.5 cr.) Detailed analysis of protein synthesis, post-translational modification, and macromolecular assembly, including the role these modifications play in mature protein function, biosynthesis, structure, function, and analysis of complex oligosaccharides. Credit given for only one of the following: C681, B602.

CHEM–C 683 Advanced Nucleic Acid Biochemistry (1.5 cr.) Mechanistic analysis of nucleic acid metabolism; specificity and role of DNA polymerases and repair pathways; DNA replication and recombination mechanisms; RNA structural motifs and physical properties; RNA synthesis and processing in gene expression; catalytic RNA molecules; applications of RNA molecules. Credit given for only one of the following: C683, B601.

CHEM–C 685 Advanced Macromolecular Structure and Interaction (1.5 cr.) Supplements and extends B503; emphasis on stability and folding mechanisms of proteins and nucleic acids and detailed thermodynamic analysis of binding interactions. Credit given for only one of the following: C685, B603.

CHEM–C 686 Structural Methods (3 cr.) In biology, structure and function are intimately connected. The aim of this class is to demystify macromolecular structure determination. We will examine X-ray crystallography and EM image reconstruction in detail, solving structures and studying the theoretical underpinnings of each technique. Class will be computer and mathematics intensive. Credit given for only one of the following: C686, B604.

CHEM–C 687 Seminar: Advanced Topics in Biochemistry (1–3 cr.) P: Consent of instructor. Topics vary yearly and include the following: physio-chemical techniques in the study of macromolecules; experimental methods in enzymology; organic chemistry of enzymatic reactions and enzyme models; conformational properties and macromolecules. Credit given for only one of the following: C687, B680.

CHEM–C 688 Seminar in Biochemistry (1–3 cr.) Attendance and participation in the weekly Biochemistry Program seminar series. Credit given for only one of the following: C688, B600, B800.

CHEM–M 501 Fundamentals of Materials I: Making, Measuring, and Modeling (3 cr.) P: Consent of instructor. Introduces techniques for fabrication, characterization, and modeling of materials with an emphasis on nanostructures. Methods (top down) for the creation and characterization of nanostructures; Band structure, conductivity, optical properties, and quantum confinement; Assembly, liquids, and phase transitions.

CHEM–M 502 Fundamentals of Materials II: Nanoscale and Molecular Materials (3 cr.) P: Consent of instructor. Introduces nanoscale and molecular materials. The first part provides an overview of methods for bottom-up synthesis and assembly of nanostructures. The second part provides case studies from the recent literature; including: nanoparticles; biological applications; molecular electronics and machines; self-assembly in artificial and biological systems.

CHEM–M 503 Supramolecular Chemistry (3 cr.) P: Consent of instructor. A one-semester overview of bottom-up fabrication of functional materials. Emphasis on the chemistry of molecularly defined assemblies and physical properties; recognition, catalysis, sensing, switching, transport, and actuation; electron transfer and energy transfer and energy transfer; interfacial assemblies; mesoporous materials; polymers, dendrimers and liquid crystals.

CHEM–M 608 Seminar: Materials Chemistry (1–3 cr.) P: Consent of instructor. Topics such as electrochemistry, biomaterials, polymers, solid state chemistry, computational chemistry, micro/nanofabrication, and environmental chemistry considered from the perspective of materials chemistry.

CHEM–A 800 Seminar: Analytical Chemistry (1 cr.)

CHEM–B 800 Seminar: Biological Chemistry (1 cr.)

CHEM–M 800 Seminar: Materials Chemistry (1 cr.)

CHEM–N 800 Seminar: Inorganic Chemistry (1 cr.)

CHEM–P 800 Seminar: Physical Chemistry (1 cr.)

CHEM–R 800 Seminar: Organic Chemistry (1 cr.)

CHEM–C 810 Research: Analytical Chemistry (arr. cr.) These courses are eligible for a deferred grade.

CHEM–C 820 Research: Materials Chemistry (arr. cr.) These courses are eligible for a deferred grade.

CHEM–C 830 Research: Inorganic Chemistry (arr. cr.)
These courses are eligible for a deferred grade.

CHEM–C 840 Research: Organic Chemistry (arr. cr.)
These courses are eligible for a deferred grade.

CHEM–C 860 Research: Physical Chemistry (arr. cr.)
These courses are eligible for a deferred grade.

CHEM–C 880 Research: Biological Chemistry (arr. cr.)
These courses are eligible for a deferred grade.

Classical Studies

College of Arts and Sciences

Departmental E-Mail: classics@indiana.edu

Departmental URL: www.indiana.edu/~classics

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Placement Examination

All newly admitted students will be required to take a translation examination in Latin and/or Greek for the purpose of placement. This examination will be given in the week preceding initial registration. It is the student's responsibility to arrive on campus in time to take this examination. No student will be permitted to enroll for courses until the results of this placement examination are delivered to the director of graduate studies.

Master of Arts Degree

Admission Requirements

Undergraduate major in Latin or Greek or the equivalent. Graduate Record Examination General Test required.

Course Requirements

A minimum of 30 credit hours of Latin, Greek, or classics courses, of which at least 22 credit hours must be in Latin or Greek. One course involving the writing of a term paper.

Final Examination

Sight translation examination (two hours) in Latin or Greek. Written examination (two hours) on the history of Greek or Latin literature.

Language Requirement

Reading proficiency in one language: French, German, or another approved modern language, or (for students majoring in Latin) classical Greek. The requirement in classical Greek may be satisfied by completing G500-G650. (The latter courses may not be taken for credit by doctoral students majoring in the Department of Classical Studies.) A grade of B or better in G650 fulfills the reading-knowledge requirement in classical Greek.

Master of Arts for Teachers Degree

Admission Requirements

Undergraduate major in Latin or Greek or the equivalent. Graduate Record Examination General Test required.

Course Requirements

The total for the M.A.T. degree is 60 credit hours, of which 24 are in classes designated by the School of Education and 10 in Supervised Student Teaching. Of the remaining 26 hours, 20 are in courses involving Greek and/or Latin language and literature, and 6 in classical civilization and culture.

Final Examination

Sight translation examination (two hours) in Latin. Written examination (two hours) on the history of Latin literature.

Doctor of Philosophy Degree

Admission Requirements

As a prerequisite for admission, a student must (1) have completed at least 24 credit hours of graduate work in classical studies; (2) show proficiency in one modern foreign language; (3) show evidence of scholarly potential as indicated by the submission of a term paper or revised version of a term paper to the Ph.D. admission committee of the department; (4) supply two letters of reference; and (5) take the Graduate Record Examination General Test.

Course Requirements

A total of 90 credit hours, including dissertation (maximum of 28 credit hours). Fifty-three (53) credit hours must consist of the 20 credit hours of core requirements (C501, C502, G536, G537, L536, and L537) and 33 additional credit hours of Latin and Greek reading and seminar courses. The remaining credit hours are distributed among the courses in the minor program.

Minor

A total of 12 to 15 credit hours of course work, to be planned in consultation with the director of graduate studies. Minor programs aim to broaden the student's knowledge in some aspect of classical studies outside the core curriculum. A minor may be taken in a single department (e.g., fine arts, comparative literature, history); in that case, the student should also consult with the director of graduate studies in that department. An interdepartmental minor (examples include "ancient studies" and "mythology studies") combines course work in other departments with appropriate courses in classical studies.

Another possibility is an interdepartmental minor in "related fields," with courses selected from comparative literature, fine arts, folklore, history, history and philosophy of science, linguistics, medieval studies, philosophy, religious studies, Renaissance studies, or any other appropriate department or school (e.g., law or music); the aim of this "related fields" minor is to introduce the student to methodologies and approaches other than the philological, which may be applied to the study of the cultures of ancient Greece and Rome.

Language Requirements

Reading proficiency in French and German; substitution for French of one other modern language will be considered on petition. This requirement must be completed before the qualifying examinations may be taken.

Qualifying Examinations

Translation examinations (three hours each) based on reading lists in Greek and in Latin. Students should have passed the reading list translation examinations in both Latin and Greek by the end of the third year (if they were admitted to the M.A. program) or by the end of the second year (if they were admitted to the Ph.D. program with an M.A. degree). Qualifying examinations are also required on the history of Greek and Latin literature (three hours each) and on a major author (three hours) chosen by the student. Students should have passed all three of the qualifying examinations by the end of the fourth year (if they were admitted to the M.A. program) or by the end of the second year (if they were admitted to the Ph.D. program with an M.A. degree). An examination on the outside minor may be required by the department of the outside minor.

Final Examination

Oral, primarily a defense of the dissertation.

Ph.D. Minor in Greek or Latin

Prospective minors should obtain a copy of "Graduate Minors in Latin and Greek" from the administrative secretary in Ballantine Hall 547 and plan their course work in advance with the director of graduate studies (Department of Classical Studies).

Faculty

Chairperson

Professor Matthew R. Christ*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Emeriti

James Halporn* (Emeritus), William F. Hansen* (Emeritus), Thomas Jacobsen* (Emeritus), Timothy Long* (Emeritus), Carroll Nelson* (Emeritus), Edwin Ramage* (Emeritus), Ian Thomson* (Emeritus)

Professors

Matthew R. Christ*, James Lee Franklin*, Eleanor Winsor Leach*, Betty Rose Nagle*

Associate Professor

Bridget Kennedy Balint, Cynthia Bannon*

Assistant Professors

Margaretha Kramer-Hajos, Jonathan Ready

Director of Graduate Studies

Professor Eleanor Winsor Leach*, Ballantine Hall 547, (812) 855-6651

Courses

Greek

CLAS–G 302 Classical Greek: Accelerated Course II (3–3 cr.) Five (5) credits each semester for undergraduates.

CLAS–G 305 Greek Tragedy (3 cr.)

CLAS–G 306 Greek Oratory (3 cr.)

CLAS–G 307 Selected Works of Plato (3 cr.)

CLAS–G 308 Readings in Biblical Greek (3 cr.)

CLAS–G 406 Homer (3 cr.)

CLAS–G 407 Greek Historians (3 cr.)

CLAS–G 410 Greek Prose Authors (3 cr.)

CLAS–G 411 Greek Comedy (3 cr.)

CLAS–G 500 Elementary Greek I (2 cr.)

CLAS–G 510 Readings in Greek Historians (4 cr.) Extensive readings in Greek from the major historians —Herodotus, Thucydides, Xenophon, and Polybius —with special attention to the development of Greek historiography.

CLAS–G 511 Readings in Greek Oratory and Rhetoric (4 cr.) Selections in Greek from the canon of the 10 Attic orators, within the rubrics of epideictic, forensic, and symbouleutic oratory. Special emphasis on situating these rhetorical works in their social milieu.

CLAS–G 512 Readings in Greek Philosophers (4 cr.)

CLAS–G 513 Readings in the Greek Novel (3 cr.) An introduction to the Greek novel based upon readings in Greek in romantic novels such as Longus' Daphnis and Chloe, comic novels such as Pseudo-Lucian's The Ass, and/or historical novels such as Pseudo-Kallisthenes' Alexander Romance. Some attention is also given to current research on the Greek novel.

CLAS–G 516 Readings in Greek Comedy (4 cr.) Examines the genres of old and new comedy, as revealed in selected comedies of Aristophanes and Menander. Added to extensive reading in Greek, students will study the literary forms of the genres and how comedy acts as an expression of the poets' engagement with their contemporary social and intellectual climate.

CLAS–G 517 Readings in Greek Tragedy (4 cr.) Careful reading of selected Greek tragedies of Aeschylus, Sophocles, and Euripides, with the goal of appreciating tragedy as a complex art form and as an important social phenomenon created in fifth-century Athens.

CLAS–G 518 Readings in Greek Epic (4 cr.) Introduction to Greek epic poetry, including the epic dialect, epic prosody, and oral poetry as a traditional art form. Readings in Greek include at least three books of Homer's Iliad or Odyssey. Some attention is also given to current research on the early Greek epic.

CLAS–G 536-537 Survey of Greek Literature I-II (4–4 cr.) A two-semester introduction to Greek literature from Homer (mid-eighth century B.C.) to Lucian (second century A.D.) through extensive readings in translation supplemented by select Greek passages and modern scholarship. Attention to the emergence and development of diverse genres within their cultural contexts.

CLAS–G 540 Readings in Byzantine Greek (4 cr.)

CLAS–G 550 Elementary Greek II (2 cr.)

CLAS–G 600 Intermediate Greek I (3 cr.) Readings from the New Testament and such authors as Aesop and Plato. Review of syntax and grammar.

CLAS–G 601 Seminar in Greek Poetry (4 cr.) Advanced study of selections from Greek poetry. The seminar will focus on issues relevant to the genre(s) to be studied.

CLAS–G 603 Seminar on Greek Tragedy (4 cr.) A survey of modes of recent scholarship on Greek tragedy.

CLAS–G 610 Seminar in the Greek Novel (4 cr.) Consideration in depth of select issues in the current scholarship on the Greek novel. Selected readings of texts in the original Greek are included. The seminar may focus upon problems of ancient Greek fiction more generally or upon study of a single novel.

CLAS–G 611 Seminar in Greek Epigraphy, Papyrology, and Palaeography (4 cr.) Detailed study of the principles of practices of Greek epigraphy, papyrology, or palaeography, with examination of selected papyrus documents, inscriptions, or other Greek texts.

CLAS–G 613 Seminar in Greek Tragedy (4 cr.)

CLAS–G 620 Seminar in Historical Texts and Historiography (4 cr.) Close study of Greek historical writing as represented both by the surviving works of the major Greek historians and fragments of other writers. Modern scholarship on historiography will encourage discussion of the relationship between historical and other kinds of writing in a Greek setting.

CLAS–G 622 Seminar on Topics in Greek Literature (4 cr.) Consideration in depth of select topics in ancient Greek literature. Readings are assigned both in original Greek texts and in the secondary literature.

CLAS–G 650 Intermediate Greek II (3 cr.) Select readings from the Iliad or Odyssey.

Latin

CLAS–L 300 Intensive Introduction to Classical and Medieval Latin (3 cr.) Four (4) credits for undergraduates.

CLAS–L 304 Catullus (3 cr.)

CLAS–L 305 Ovid (3 cr.)

CLAS–L 307 Cicero (3 cr.)

CLAS–L 308 Caesar (3 cr.)

CLAS–L 309 Introduction to Virgil's Aeneid (3 cr.)

CLAS–L 400 Intensive Study of Literary Latin (3 cr.) Four (4) credits for undergraduates.

CLAS–L 407 Roman Lyric and Elegy (3 cr.) P: One of L304, L305, L307, L308, L309, or L310. Introductory study of Roman lyric and elegiac poetry, with selections from Catullus, Horace, Tibullus, Propertius, and Ovid. Emphasis on interpretation of individual poems and on their place in the ancient traditions of lyric and elegy.

CLAS–L 408 Roman Comedy (3 cr.)

CLAS–L 409 Readings in Medieval Latin (3 cr.)

CLAS–L 423 Roman Satire (3 cr.)

CLAS–L 424 Silver Age Historians (3 cr.)

CLAS–L 426 Rhetoric and Oratory (3 cr.)

CLAS–L 427 Virgil's Eclogues and Georgics (3 cr.)

CLAS–L 428 Advanced Study of Virgil's Aeneid (3 cr.) P: One of L304, L305, L307, L308, L309, or L310. Extensive reading in the Aeneid, with special attention to the poetic art of Virgil. Detailed study of Latin epic poetry.

CLAS–L 429 Roman Letters (3 cr.)

CLAS–L 430 Lucretius (3 cr.)

CLAS–L 432 Livy (3 cr.)

CLAS–L 505 Latin Grammar, Composition, and Reading (4 cr.) Exercises in Latin composition requiring control of principle features of Latin syntax and sight reading of previously unseen passages leading to rapid mastery of texts.

CLAS–L 509 Cicero, His Life and Works (4 cr.) This rapid readings course will promote the development of reading and comprehension skills, which will be actively utilized as a basis for class discussions and papers. Selections will cluster around a particular moment in Cicero's career so that the interrelationship between correspondence, orations, and philosophical/oratorical writings can be discussed.

CLAS–L 510 Readings in Latin Historians (4 cr.) Intensive reading of one of the major Roman historians (Caesar, Livy, Tacitus) or a survey of the same with consideration of their places, antecedents, and successors in Roman literature. Emphasis on reading and comprehension of the texts.

CLAS–L 511 Readings in Latin Oratory and Rhetoric (4 cr.) Through intensive readings in Ciceronian speeches or a selection of readings drawn from Roman rhetorical writers (Cicero, Seneca, Tacitus), this course will examine the theory and practice of rhetoric at Rome in the context of philosophical, literary, and historical issues.

CLAS–L 513 Readings in the Roman Novel (4 cr.) Through intensive readings in Roman prose fiction, including but not limited to the works of Petronius and Apuleius, this course will examine the genre of prose fiction in its literary and historical contexts.

CLAS–L 515 Readings in Latin Elegy (4 cr.) Readings will highlight the development of elegiac verse as a genre with attention to issues of current interest: the politics of poetic language; the construction of gender roles; the first-person speaker as an extra-societal observer and commentator.

CLAS–L 536-537 Survey of Latin Literature I-II (4–4 cr.) Readings in Latin and in translated texts will present Latin literature from Livius Andronicus through Juvenal. Traditional scholarly questions will be introduced, but discussion will emphasize the construction of continuities in Roman literature by considering literary history as an aspect of cultural history.

CLAS–L 540 Medieval Latin (4 cr.) P: L409 or an equivalent course in medieval Latin. Students not offering one of these prerequisites will be required to pass an examination on medieval texts before consent to enroll will be granted.

CLAS–L 545 Rapid Reading and Principles of Grammar (4 cr.) Readings in the major authors of the Republic and Golden Age, and organized study of grammar to enable the student to read rapidly for comprehension, not translation.

CLAS–L 600 Seminar in Latin Epic (4 cr.) Emphasis upon problems involving the interface of poetics and politics. Either a special topic (e.g., epic divinities) or an individual text may serve as the focus for study involving contemporary approaches to poetry and to culture.

CLAS–L 602 Seminar in Latin Comedy (4 cr.)

CLAS–L 603 Seminar in Latin Tragedy (4 cr.) Study of the fragments of Republican tragedy and the evidence for lost plays will be followed by research into historical, philosophical, and literary questions posed by Seneca's Tragedies.

CLAS–L 610 Seminar in the Roman Novel (4 cr.) A study of Roman prose fiction through selected readings in the works of Petronius and Apuleius, and in the current scholarship on the Roman novel and modern theoretical approaches to fiction. The seminar may focus on problems in the study of Roman fiction or on a single novel.

CLAS–L 611 Seminar in Latin Epigraphy or Palaeography (4 cr.) Advanced study of the methodologies and concentration on select Latin inscriptions or manuscripts.

CLAS–L 620 Seminar in Latin Historical Texts and Historiography (4 cr.) A study of Roman historical writing from Republican, Imperial, or late Antique periods. The seminar may focus on literary, legal, documentary, or religious texts, or on problems in Roman history or historiography. Discussion will address the methodologies of current historical and historiographical scholarship.

CLAS–L 803 Supervised Reading Program (1–4 cr.)

Classics

CLAS–C 405 Comparative Mythology (4 cr.) Three (3) credits for undergraduates.

CLAS–C 409 Roman Literature and Art (3 cr.)

CLAS–C 411 The Art and Archaeology of Anatolia (4 cr.) Three (3) credits for undergraduates.

CLAS–C 412 The Art and Archaeology of the Aegean (4 cr.) Three (3) credits for undergraduates.

CLAS–C 413 The Art and Archaeology of Greece (4 cr.) Three (3) credits for undergraduates.

CLAS–C 414 The Art and Archaeology of Rome (4 cr.) Three (3) credits for undergraduates.

CLAS–C 416 Ovidian Mythology and its Tradition (3 cr.)

CLAS–C 419 The Art and Archaeology of Pompeii (4 cr.) P: For graduate students: reading knowledge of Italian. Three (3) credits for undergraduates.

CLAS–C 501 Introduction to Graduate Study: Literary and Cultural Theory for Classicists (3 cr.) Provides familiarity with influential theories and methodologies of contemporary interpretive scholarship and evaluates their relevance to the interpretive practices of classical studies. A brief survey of formative developments in the history of classical scholarship will be followed by a chronologically ordered study of prominent twentieth-century writings.

CLAS–C 502 Bibliography and Research Resources for Classical Studies (1 cr.) Provides practice in using some of the major electronic and printed sources of bibliography and historical information available for the study of Greek and Roman antiquity. An introduction to ancillary disciplines such as epigraphy and numismatics will be included.

CLAS–C 503 The Ancient City (4 cr.) Survey of the topography and monuments of one of the major cities —Athens, Corinth, Rome, Ostia, for example—of the classical world. Introduces students to the individual city and its monuments. Provides through the monuments a better understanding of urbanism through the history of the specific city, its statesmen, and authors.

CLAS–C 506 Teaching of Classics in College (1 cr.) Required of all graduate students teaching a departmental course for the first time.

CLAS–C 507 Foreign Language Institute (1–6 cr.) Formal study of Latin and Roman culture for secondary teachers and those preparing for secondary teaching. Normally taught in two-week sessions in the summer.

CLAS–C 610 Seminar in the Greek and Roman Novels (4 cr.) Consideration in depth of select issues in the current scholarship on the ancient novels. The emphasis of the seminar is upon the secondary literature and upon the novels in English translation; a knowledge of Greek or Latin is not required.

CLAS–C 623 Seminar in Classical Archaeology (4 cr.) P: C412 or A412 or consent of instructor. In-depth analysis and discussion of selected topics in Aegean, Greek, Etruscan, or Roman archaeology, including interconnections with other Mediterranean, Anatolian, or Near Eastern cultures.

CLAS–C 875 Research in Greek or Latin (arr. cr.)

CLAS–C 880 Ph.D. Thesis (arr. cr.)

Cognitive Science

College of Arts and Sciences

Departmental E-mail: cogsci@indiana.edu

Departmental URL: www.cogs.indiana.edu

Curriculum

Degrees Offered

Doctor of Philosophy and Joint Doctor of Philosophy in Cognitive Science and Another Discipline

Program Information

The Cognitive Science Program comprises an interdisciplinary research program and a doctoral degree program. Students carry out intensive research projects in state-of-the-art computer-based laboratories. There are two Ph.D. degree options: a standalone Ph.D. in Cognitive Science and a joint Ph.D. in Cognitive Science and another discipline, for example, psychology, computer science, philosophy, linguistics, or speech and hearing sciences. The program is designed to train students in theory development and model building (mathematical,

formal, and computer simulation models), in empirical research, and in the development of the conceptual framework and technical skills needed for successful careers in research, teaching, business, and government.

Doctor of Philosophy Degree

Admission Requirements

Admission is by approval of the program's graduate admission committee. Applicants should have an undergraduate major in Cognitive Science, Psychology, Computer Science, Philosophy, Linguistics, Biology, or Anthropology; basic computer programming skills; and basic knowledge of mathematics for science, including calculus and statistics. In exceptional cases, the programming or mathematics admission requirements may be waived and satisfied while pursuing graduate study.

Course Requirements

A minimum of 90 credit hours, including the core courses COGS Q520 (3 cr.), COGS Q530 (3 cr.), COGS Q540 (3 cr.), COGS Q550 (3 cr.), COGS Q551 (3 cr.), and COGS Q560 (3 cr.) and selections totaling at least 16 credit hours from offerings listed in the Program in Cognitive Science or cross-listed with other departments, divisions, or programs. A maximum of 6 of these 16 credit hours may come from pure research courses (COGS Q799, COGS Q899, or the equivalent in another department). On the basis of their undergraduate background, students may be exempted from one or more of the core courses other than COGS Q540, which all students must take. Exemption from any core courses requires approval by the director of graduate studies of the program. Students must also register for at least four semesters in the Colloquium Series course COGS Q733. In one of these semesters, the only one for which credit is received, each student will be expected to give a lecture on his or her independent research as a part of the Colloquium Series.

Research Project Requirement

All Cognitive Science stand-alone Ph.D. students are required to complete a Research Project . The project should constitute significant original research done while the student is enrolled in the Ph.D. program. Ph.D. students must decide on a supervisor and topic for their projects by the end of their first year and submit the Research Project Progress Report to the Cognitive Science Program office. The project must be completed by the end of their second year; at this time they should submit the Completion of the Research Project Form.

Content Specialization

Each student selects a Content Specialization, an area of study that can be approached from the perspectives of the different disciplines within cognitive science. With the approval of the student's advisory/research committee, any relevant area of cognitive science may fulfill the Content Specialization requirement. Some possibilities are Language and Speech, Dynamical Systems, Logic, and Human-Computer Interaction. Students must complete at least five courses in their specialization, and these courses must be taken in at least two different departments. The Content Specialization should be selected by the end of the student's second year in the program, and the courses selected must be approved by the student's advisory/research committee.

Minor Requirement

Students must complete a minor in another department or program. Courses counting toward the minor may also count toward the student's Content Specialization. The minor should be completed by the beginning of the student's fourth year.

Qualifying Examination

Each student is expected to pass a Qualifying Examination by the end of September of the student's third year in the program. If the student fails the exam, it may be retaken once, by the end of the student's third year.

Prior to the qualifying examination, each student will be expected to turn in a Qualifying Examination Petition Form with the signatures of the Director of Graduate Studies and Advisory Committee. This form must be completed by the end of the student's second year.

Students pursuing joint degrees in Cognitive Science and another discipline may postpone the taking of the Qualifying Examination by one year. Any other students who believe they are unable to complete the Qualification Examination by the normal deadline must petition to have the deadline extended;

(or) must complete the Deferred Qualifying Exam Option on the Qualifying Examination Petition Form

The examination is expected to have a written and an oral component and to demonstrate (1) in-depth knowledge of the student's Content Specialization, (2) knowledge of some other area of Cognitive Science, (3) academic writing competence, and (4) the ability to defend a position in an oral setting.

In consultation with his or her Advisory Committee, the student will agree on the format of the examination. Within these constraints, two broad categories of Qualifying Examinations are possible: (1) Conventional Written Examination or (2) Papers. Details regarding these categories are available from the Director of Graduate Studies, the Graduate Secretary, or the student's Advisory Committee.

Joint Doctor of Philosophy Degree in Cognitive Science and Another Discipline

Admission Requirements

Acceptance into the Joint Cognitive Science Ph.D. program is contingent upon admission into another degree-granting program at Indiana University Bloomington, hereafter referred to as the "originating discipline" or "originating department." Students must apply to the originating department, informing it that they also intend to join the Joint Cognitive Science Ph.D. Program. Students are required to make such a request prior to their qualification exams. There is no separate admission process through the Cognitive Science Program.

Course Requirements

A minimum of 90 credit hours, of which 32 credit hours must be in courses listed or cross-listed in cognitive

science, including COGS Q520 (3 cr.), COGS Q530 (3 cr.), COGS Q540 (3 cr.), COGS Q550 (3 cr.), COGS Q551 (3 cr.), COGS Q733: three semesters at 0 credits and one semester at 1 credit when the required colloquium is given by the student, and at least 6 credit hours of breadth coursework not in the originating discipline and not among the Q-courses or pure research courses such as Q799 and Q899. A Q-course that is not cross-listed in any other unit may satisfy the breadth requirement with the approval of the student's advisory committee. The 32 credit hours may include a maximum of 6 credit hours in pure research courses (COGS Q799, COGS Q899, or the equivalent in originating departments). Strong encouragement is given to interdisciplinary diversification. Note that courses may count toward the requirements of both cognitive science and the originating department.

Tool-Skills Requirement

Statistics PSY K300 or PSY K310 or the equivalent.

Qualifying Examination

There are two options for the qualifying examination: (a) an examination in the originating discipline and a separate comprehensive examination in cognitive science (these may be taken at separate times); or (b) a joint examination covering relevant areas of both the originating discipline and cognitive science, as determined by the advisory committee and with permission of both the originating discipline and the Cognitive Science Program. The cognitive science examination is normally taken after completion of the cognitive science course requirements. The examination may be repeated only once.

Public Colloquium

The student must give a colloquium as part of the COGS Q733 colloquium series advertised at large to the university community, and covering some aspect of the student's research in cognitive science. The research covered may be from any stage of the student's career, including (but not restricted to) the thesis research.

Final Examination

The public and oral defense of the dissertation will be conducted jointly with the student's originating discipline.

Ph.D. Minor in Cognitive Science

Graduate students obtaining a Ph.D. in another discipline may find that that discipline gives them the option of taking a minor in cognitive science. To obtain such a minor, students must satisfy the following requirements: (a) obtain approval from the Cognitive Science Program; and (b) complete COGS Q540; one of the following: COGS Q520, COGS Q530, COGS Q551, COGS Q560, or COGS Q550; at least two semesters of COGS Q733; and at least 6 other credit hours in cognitive science and/or cross-listed courses not in the originating discipline.

Certificates in Cognitive Science

The Cognitive Science Program is extremely broad, ranging from psychology to business to anthropology to computer science, to name just a few. Students in other disciplines may elect to focus on an area or areas within the broad range of cognitive science. Certificates are open to students upon request; several different cognitive science certificate programs are described in the following pages. Note that certificates are not required for a joint Ph.D. degree. The student will inform the cognitive science office, the student's cognitive science advisor, and the certificate director of intent to pursue a certificate.

General Requirements for Graduate Area Certificates

1. As soon as the student decides to pursue a certificate, a written proposal must be submitted to the Certificate Director and Director of Graduate Studies giving a detailed course of study. The proposal may be a revised draft of an earlier proposal not approved or an alteration of a previously approved proposal, and may contain a request for a revision of any of the stated requirements.
2. The proposal must be approved by the student's Advisory Committee. The student must file a copy of the approved proposal with the Cognitive Science Program office.
3. The student's advisory/research committee must attest that the approved course of study has been completed successfully. At this time, the University Graduate School will be notified of the certificate completion. Ideally, requirements and course work for certificates should be completed at the time of nomination to candidacy.
4. The certificate is awarded upon completion of requirements 1 through 3 and completion of the joint Ph.D. Achievement of the certificate will be noted on official transcripts.

Graduate Area Certificate in Dynamical Systems in Cognitive Science

Students will develop an understanding of problems introduced by a dynamical perspective on cognitive phenomena and of the theoretical and methodological means of addressing those problems as found in dynamical systems. Each student will apply this understanding and analysis to a content area of their choice including study of perception, cognition, motor behavior, neural networks, language, and development.

Specific Requirements

1. Prerequisites. Students should have taken courses in calculus (two to three semesters) at the very least. In addition, courses in differential equations, linear algebra, and (point set) typology would be helpful.
2. Required course. Students must take COGS Q580 Introduction to Dynamical Systems in Cognitive Science.
3. Additional advanced electives. Students must complete an additional four courses selected from among the following: COGS Q550 Models in Cognitive Science; PSY P651 Perception/Action; HPSC X755 Philosophical Issues in Chaos and Nonlinear Dynamics; LING L541 Phonetics; LING L641 Advanced Phonetics; PHIL P561 Philosophy of Mind; CSCI B551 Element of Artificial Intelligence; CSCI B552 Knowledge-Based Computation; CSCI B553 Biomorphic Computation; CSCI B651 Natural Language Processing; CSCI B652 Computer Models of Symbolic Learning; CSCI B657 Computer Vision; CSCI B659 Topics in Artificial Intelligence; PSY P717 Evolutionary Basis of Learning; PSY P615 Developmental Psychology; COGS Q750 Neural Networks as Models of Cognition; HPSC-X755 Fractals.

4. Qualifying exams. At least one question on dynamical systems must be included on the student's qualifying exams.
5. Dissertation. The student's dissertation must include application of dynamical systems to the specific problem under study.

Graduate Area Certificate in Human-Computer Interaction

Students will demonstrate proficiency in a broad range of courses involving the applied cognitive analysis of human-computer interaction (HCI).The program will emphasize the theoretical and methodological issues associated with designing and evaluating cognitively compatible user interfaces to interactive technologies.

Specific Requirements

1. The student must submit a written proposal to the Advisory Committee giving a detailed course of study. The proposal may be a revised draft of an earlier proposal, or an alteration of a previously approved proposal, and may contain a request for a revision of any of the stated requirements. The proposal must be approved by the Advisory Committee.
2. Students for the Cognitive Science Certificate must complete an additional four courses selected from among the following to ensure courses are taken from at least two departments other than the student's home department: CSCI A546 User Interface Programming; CSCI B581 Advanced Computer Graphics; CSCI B582 Image Synthesis; CSCI B665/B666 Software Engineering Management/Implementation; CSCI B669 Topics in Database and Information Systems; CSCI B689 Topics in Graphics and Human Computer Interaction; INFO I502 Prototyping; INFO I590 Pervasive and Ubiquitous Computing; INFO I590 HCI Design I; INFO I590 HCI Usability; SLIS S561 User Interface Design for Information Systems; SLIS S637 Information Visualization; S661 Concepts and Contemporary Issues in Human-Computer Interaction; S635 OntologiesSLIS S566 Digital Libraries; EDUC P544 Applied Cognition and Learning Strategies; CSCI P565-566 Software Engineering I-II; EDUC R685 Human-Computer Interface Design; EDUC P600 Topical Seminar in Learning Cognition and Instruction; EDUC P544 Applied Cognition and Learning Strategies; SPHS S522 Digital Signal Processing; BUS S601 MIS Research Topics in Applications Systems Design; BUS S602 MIS Research Topics in Administration and Technology; TEL T571 Applied Emotional and Cognitive PsychologyTheory; TEL T602 Seminar in Processes and Effects: The Information Processing of Media.
3. The student's dissertation must address issues related to human-computer interaction. The Cognitive Science Certificate in HCI is awarded upon completion of the above requirements and completion of the requirements for the Ph.D. (either as a joint major in Cognitive Science and a home department, or as a Cognitive Science minor and a major in a home department).

Graduate Area Certificate in Language and Speech

Students will demonstrate proficiency in a broad range of topics that focus on issues related to language and speech. The program of study will emphasize mastery of language structure, language processing, and computational approaches to linguistic analysis. An independent research project exploring some facet of language and speech will be required.

Specific Requirements

1. Students must complete at least five approved graduate courses in the area of language and speech.
2. Courses in language and speech must be taken in at least two different departments.
3. Courses must include at least one dealing with language structure and at least one dealing with language processing or acquisition. Courses in language structure include most linguistics courses, PHIL-P 520, and PHIL-P 720. Courses in processing and acquisition include PSY P623, CSCI B651, and periodic seminars on language-related topics in these departments.
4. Students must demonstrate familiarity with computer modeling of cognitive processes. This requirement can be met through course work (COGS Q580, PSY P556, or various courses in Computer Science including CSCI B551, CSCI B552, CSCI B553, CSCI B651, and CSCI B652) or through a written report of research that includes a computer program written by the student. This report could be a master's or Ph.D. thesis.
5. The student's cognitive science qualifying examination must include at least one section on a topic in language and speech.
6. The student's dissertation must address issues related to language and speech.

Graduate Area Certificate in Logic, Language, and Computation

The area covered by this certificate is applied logic; i.e., logic as applied to information processing. It is an area of research that is of increasing importance in artificial intelligence and computer science. Students will demonstrate their mastery of courses having to do with symbolic information processing.

Specific Requirements

The requirements include at least 18 credit hours of course work (including research and seminars). At least two courses must be taken outside the student's home department. Each proposal for certification would need to demonstrate both breadth and depth in the general area of logic, language, and computation.

1. Prerequisites. Students should demonstrate mathematical maturity by having taken one or more courses in the following: set theory, discrete mathematics, abstract algebra, linear algebra, topology, and mathematical logic.
2. Students must take PHIL P505 and PHIL P506 Logical Theory I-II or demonstrate equivalent knowledge of completeness for first-order logic, together with the Gödel incompleteness and undecidability results. If students demonstrate knowl-

edge of this material, they may take other courses from the lists of advanced courses given below.
3. Students must select at least two or more advanced courses from a list that includes CSCI B501 Theory of Computing; PHIL P550 Systems of Modal Logic; PHIL P551 Philosophy and the Foundations of Mathematics; PHIL P552 Philosophy of Logic; LING L626 Semantics of Natural Language; LING L640 Quantitative Linguistics; MATH M682 Model Theory; and MATH M583 Set Theory.
4. Students must take a research seminar, either one generally designated as such. Some examples: PHIL P750 Seminar Logic, PHIL P751 Seminar Logic, or MATH M781-782 Selected Topics in Mathematical Logic), or another seminar approved by the Logic Certificate Director.
5. Students will be expected to take active part in the weekly Logic Seminar.
6. The student's dissertation must address issues in the general area of logic, language, and computation.

Graduate Area Certificate in Modeling in Cognitive Science

Students will demonstrate their mastery with a broad selection of courses involving mathematical and computer simulation approaches to modeling, with a specialization in at least one area of modeling, and with a research project involving modeling.

The program will emphasize both basic techniques and applications in particular content areas.

Specific Requirements

1. Students must fulfill 18 credit hours of courses in the modeling area. Required course: COGS Q550 Models in Cognitive Science, and at least five additional courses in modeling (15 credits minimum).
2. These courses must demonstrate both breadth and specialization, and a grasp of both methods and applications. The course options given below provide examples of courses currently appropriate to accomplish these goals.The courses should include at least one course in basic techniques and methods (PSY P605 Introduction to Mathematical Psychology; COGS Q580 Introduction to Dynamic Systems in Cognitive Science; MATH M447-MATH M448 Mathematical Models and Applications; PHIL P550 Systems of Modal Logic); and at least one course in applications (COGS Q750 Neural Networks as Models of Cognition; CSCI B651 Natural Language Processing; CSCI B652 Computer Models of Symbolic Learning; LING L611 Models of Linguistic Structure; PSY P648 Choice Behavior).The selected courses must be taken from at least two departments, excluding courses listed only in the Cognitive Science Program. These courses may not include a course whose content consists almost entirely of a research project (such courses and projects are separately covered below).
3. Students must demonstrate a grasp of modeling in research, either through course work (COGS Q689 Computer Simulation Project; PSY P556 Independent Computer Project), or through a written report of research involving modeling (includes master's or Ph.D. projects).
4. The Ph.D. qualifying examination in the Cognitive Science Program must contain at least one section on a modeling-related topic.

Faculty

Director

Robert L. Goldstone* (Psychological and Brain Sciences)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professors

Robert L. Goldstone* (Psychological and Brain Sciences), David B. Pisoni* (Psychological and Brain Sciences), Elliot R. Smith*(Psychological and Brain Sciences)

Chancellor's Professor and Distinguished Professor of Psychological and Brain Sciences
Robert Nosofsky*, Linda Smith *

College of Arts and Sciences Distinguished Professor of Cognitive Science; Adjunct Professor of Comparative Literature; Director, Center for Research on Concepts and Cognition

Douglas R. Hofstadter*

Distinguished Professor of Biology and Gender Studies

Ellen D. Ketterson*

Distinguished Professor and Luther Dana Waterman Professor of Psychological and Brain Sciences

Richard M. Shiffrin*

Distinguished Professor and Rudy Professor of Psychological and Brain Sciences

James T. Townsend* (Psychological and Brain Sciences)

Distinguished Scholar of Psychological and Brain Sciences

William Estes

Oscar R. Ewing Professor of Philosophy

J. Michael Dunn (Emeritus)

Barbara Jacobs Chair in Education

Thomas M. Duffy*, Sasha Barab *

Rudy Professors

Bennett Bertenthal* (Psychological and Brain Sciences), Stanley Wasserman* (Psychological and Brain Sciences, Sociology, Statistics)

Professors

Colin Allen* (History and Philosophy of Science), Kathleen Bardovi-Harlig* (Second Language Studies), Randall Beer* (School of Informatics and Computing), Geoffrey Bingham* (Psychological and Brain Sciences), Katy Börner* (Information Science), Jerome Busemeyer*

(Psychological and Brain Sciences), Thomas Busey* (Psychological and Brain Sciences), Phil Connell* (Speech and Hearing Sciences, Linguistics), Steven Franks* (Linguistics, Slavic Languages and Literature), Judith Gierut* (Speech and Hearing Sciences), Andrew Hanson* (School of Informatics and Computing), Diane Kewley-Port* (Speech and Hearing Sciences), John Kruschke* (Psychological and Brain Sciences), Annie Lang* (Telecommunications), David Leake* (School of Informatics and Computing), Richard Lesh* (School of Education), Lawrence Moss* (Mathematics), Timothy O'Connor* (Philosophy), Jonathan Plucker* (Educational Psychology), Robert Port* (Emeritus, Linguistics, School of Informatics and Computing), Yvonne Rogers* (Library and Information Sciences, Informatics), Kathy Schick* (Anthropology), Martin Siegel* (School of Education), (Psychological and Brain Sciences), Olaf Sporns* (Psychological and Brain Sciences, Neuroscience), Erik Stolterman* (School of Informatics and Computing), William Timberlake* (Psychological and Brain Sciences), Peter Todd* (Cognitive Sciences,School of Informatics and Computing), Nicholas Toth* (Anthropology), Michael W. Trosset* (Statistics), Larry Yaeger* (School of Informatics and Computing)

Associate Professors

Johan Bollen (Informatics), Rowan Candy* (Optometry), Kenneth de Jong* (Linguistics), Hamid Ekbia (Library and Information Science, Cognitive Science), Julia Fox* (Telecommunications), Michael Gasser* (School of Informatics and Computing, Cognitive Science), Lisa Gershkoff-Stowe* (Speech and Hearing Sciences), Jason Gold* (Psychological and Brain Sciences), Eric Isaacson* (Music), Jennifer Lentz* (Speech and Hearing Sciences), Jonathan W. Mills* (School of Informatics and Computing), John Paolillo* (Library and Information Science), Luiz Pessoa* (Psychological and Brain Sciences), Luis Rocha* (Informatics), Matthias Scheutz* (Cognitive Sciences, School of Informatics and Computing, Informatics), Thomas Schoenemann (Anthropology), Jonathan Weinberg* (Philosophy)

Assistant Professors

John M. Beggs* (Physics), Joshua W. Brown* (Psychological and Brain Sciences), Nathaniel Brown (School of Education), Isabelle Darcy (Second Language Studies), Markus Dickinson* (Linguistics) Melissa Gresalfi (Learning Sciences, School of Education), Amit Hagar* (History and Philosophy of Science), Karin Harman James* (Psychological & Brain Sciences), Kris Hauser (School of Informatics and Computing),Thomas W. James* (Psychological and Brain Sciences), Michael Jones* (Cognitive Sciences, Psychological and Brain Sciences), Sandra Kuebler* (Linguistics), Chien-Jer Charles Lin (East Asian Studies), Sharlene Newman* (Psychological and Brain Sciences), Nicholas Port* (Optometry), Robert Joseph Rydell* (Psychological & Brain Sciences), Selma Sabanovic (School of Informatics and Computing), Chen Yu* (Psychological and Brain Sciences)

Associate Faculty

Arthur F. Bentley Professor
Elinor Ostrom* (Political Science, Public and Environmental Affairs)
Barbara Jacobs Chair in Education
Donald J. Cunningham* (Emeritus)

Chancellor's Professors

James C. Craig* (Psychological and Brain Sciences), Daniel Dinnsen* (Linguistics), Steven Sherman* (Psychological and Brain Sciences)

Chancellor's Professor of Economics and Henry H. H. Remak Professor of West European Studies

Roy Gardner*

John F. Mee Chair of Management

Phillip Podsakoff*

Martha Lea and Bill Armstrong Chair in Teacher Education

Frank K. Lester* (Emeritus)

Robert A. Lucas Chair of Law

Jeffrey Evans Stake*

Rudy Professor

George von Furstenberg* (Emeritus, Economics)
Alessandro Vespignani* (Informatics and Computing)

Tanis Chair of History and Philosophy of Science

Elisabeth Lloyd*

Professors

Joyce Alexander* (School of Education), Curtis Bonk* (School of Education), Arthur Bradley* (Optometry), J. Clancy Clements* (Linguistics, Spanish and Portuguese), William Corsaro* (Sociology), Ivor K. Davies* (Emeritus, Instructional Systems Technology), Stuart Davis* (Linguistics), Joseph Farley* (Psychological and Brain Sciences), Daniel Friedman* (School of Informatics and Computing), Preston Garraghty* (Psychological and Brain Sciences), Jeffrey Hart* (Political Science), Beverly Hartford* (Emeritus, Linguistics), Julia Heiman* (Psychological and Brain Sciences), Ed Hirt* (Psychological and Brain Sciences), Marianne Kielian-Gilbert* (Music), Eugene Kintgen* (Emeritus, English), David MacKay* (Emeritus, Business, Geography), Daniel Maki* (Emeritus, Mathematics), Emilia Martins* (Biology), David McCarty* (Philosophy), Eugene McGregor Jr.* (Public and Environmental Affairs, Political Science), Michael McRobbie* (School of Informatics and ComputingInformatics, Philosophy), Laura Murray* (Speech and Hearing Sciences), Christopher Peebles* (Emeritus, Anthropology), Philip Podsakoff* (Business), Paul Purdom* (School of Informatics and Computing), Charles Reigeluth* (School of Education), Thomas Schwen* (Emeritus, School of Education), Robert Sherwood* (School of Education), Maynard Thompson* (Emeritus, Mathematics), Larry Thibos* (Optometry), Frederick Unverzagt (Medical and Molecular Genetics, Medical Neurobiology), Dirk Van Gucht* (School of Informatics and Computing), , James Walker* (Economics), Charles Watson* (Emeritus, Speech and

Hearing Sciences, Psychological and Brain Sciences), Arlington Williams II* (Economics), Wayne Winston* (Business)

Associate Professors

Raquel Anderson* (Speech and Hearing Sciences), Eli Blevis* (Informatics), Tom Evans* (Geography), Theodore Frick* (School of Education), Dennis Groth* (School of Informatics and Computing), Daniel Hickey* (School of Education), Yoshihisa Kitagawa* (Linguistics), Filippo Menczer* (School of Informatics and Computing,School of Informatics and Computing), Robert F. Potter* (Telecommunications), Gregory Rawlins* (School of Informatics and Computing), Dennis Senchuk* (Philosophy, Education), Bruce Solomon* (Mathematics), Frances Trix (Anthropology, Linguistics)

Assistant Professors

Julie Anderson (Speech & Hearing Sciences),Theresa Burnett (Speech and Hearing Sciences), Amy Hackenberg (School of Education), Laura Hurley* (Biology), Kalpana Shankar* (School of Informatics and Computing , David Stringer (Second Language Studies)

Associate Scientists

Erick Janssen* (The Kinsey Institute, Psychological and Brain Sciences), Gary Kidd* (Speech and Hearing Sciences)

Senior Lecturer

Leah Savion (Philosophy)

Graduate Advisor

Associate Professor Michael Gasser*, School of Informatics and Computing, Lindley Hall 230H, (812) 855-7078

Courses

Cross-Listed Courses

The following courses may be used to satisfy the credit hour requirements of the Cognitive Science Program. Additional courses whose content in a given year is sufficiently relevant to cognitive science (including seminars, new courses, or courses with topical content) may also be used to satisfy the requirements, conditional upon acceptance by the Cognitive Science Program of a petition including justification. For an updated list of cross-listed courses, please see the Cognitive Science website.

Anthropology

ANTH L580 Semiotics and Human Ethnology (2 cr.)
ANTH L840 Ethnolinguistic Seminar (1-2 cr.)

Kelley School of Business

BUS S600 Research Design and Methods in Management Information Systems (3 cr.)
BUS S601 Management Information Systems Research: Topics in Application Systems Development (3 cr.)
BUS S602 Management Information Systems Research: Topics in Administration and Technology (3 cr.)

Computer Science

CSCI A 590 Topics in Programming (3 cr.)
CSCI A 592 Introduction to Software Systems (3 cr.)
CSCI A 593 Computer Structures (3 cr.)
CSCI A594 Data Structures (3 cr.)
CSCI B501 Theory of Computing (3 cr.)
CSCI B502 Computational Complexity (3 cr.)
CSCI B510 Introduction to Applied Logic (3 cr.)
CSCI B521 Programming Language Principles (3 cr.)
CSCI B522 Programming Language Foundations (3 cr.)
CSCI B551 Elements of Artificial Intelligence (3 cr.)
CSCI B552 Knowledge-Based Computation (3 cr.)
CSCI B553 Biomorphic Computation (3 cr.)
CSCI B621 Advanced Concepts in Programming Languages (3 cr.)
CSCI B622 Programming Language Type Systems (3 cr.)
CSCI B651 Natural Language Processing (3 cr.)
CSCI B652 Computer Models of Symbolic Learning (3 cr.)
CSCI B657 Computer Vision (3 cr.)
CSCI B659 Topics in Artificial Intelligence (1-6 cr.)
CSCI P515 Specification and Verification (3 cr.)
CSCI Y890 Theses Readings and Research

East Asian Studies Center

EALC E600 Seminar In East Asian Studies (when appropriate)

Economics

ECON E626 Game Theory (3 cr.)

School of Education

EDUC H650 Theory of Knowledge and the Educational Process (3 cr.)
EDUC P530 Instructional Psychology (3 cr.)
EDUC P540 Learning and Cognition in Education (3 cr.)
EDUC P544 Applied Cognition and Learning Strategies (3 cr.)
EDUC P550 Cognition and Semiotics (3 cr.)
EDUC P572 Theory and Method in Learning Science (3 cr.)
EDUC P574 Topical Seminar in Learning Scienc (when appropriate) (3 cr.)
EDUC P591 Cognitive Assessment and Intervention (3 cr.)
EDUC P600 Topical Seminar in Learning, Cognition, and Instruction (3 cr.)
EDUC P633 Capturing learning in context “Advanced Qualiftative Methods!” (3 cr)
EDUC P640 Thinking and Learning in Social Contexts (3 cr.)
EDUC P674 Advanced Topical Seminar in Learning Sciences (when appropriate)
EDUC Q610 Science Education Curriculum (3 cr.)
EDUC R542 Instructional Graphics Design (3 cr.)
EDUC R561 Evaluation and Change in the Instructional Development Process (3 cr.)
EDUC R586 Practicum in Instructional Systems Technology (1-3 cr.)
EDUC R611 Instructional Technology Foundations (1 cr.)
EDUC R622 Learning Environments Design (3 cr.)
EDUC R630 Learner Analysis in the Instructional Technology Process (3 cr.)
EDUC R695 Topical Inquiry Seminar in Instructional Systems Technology (3 cr.)
EDUC Y530 Topics in Computer Analysis of Educational Data (1-3 cr.)

Folklore and Ethnomusicology

FOLK F714 Paradigms of Ethnomusicology (3 cr.)

FOLK F722 Colloquium in Theoretical Folklore/ Ethnomusicology (3 cr.)
FOLK F738 Psychological Issues in Folklore (3 cr.)

French and Italian

FRIT F576 Introduction to French Phonology (3 cr.)
FRIT F577 Introduction to French Syntax (3 cr.)
FRIT F580 Applied French Linguistics (3 cr.)
FRIT F603-F604 History of the French Language (3 cr.)
FRIT F670 Advanced French Phonology (3 cr.)
FRIT F671 Advanced French Syntax (3 cr.)
FRIT F672 French Dialectology (3 cr.)
FRIT F673 Topics in the Learning and Teaching of French (3 cr.)
FRIT F675 Studies in French Linguistics (3 cr.)
FRIT F676 Structure and Sociolinguistics Aspects of Haitian Creole and Haitian French (3 cr.)
FRIT F677 French Lexicology and Lexicography (3 cr.)
FRIT F678 French Morphology (3 cr.)

School of Health, Physical Education, and Recreation

HPER K542 Neuromuscular Control of Movement (3 cr.)

History and Philosophy of Science

HPSC X551 Survey of the Philosophy of Science (3 cr.)
HPSC X552 Modern Philosophy of Science (3 cr.)
HPSC X755 Special Topics in the Philosophy of Science (2-5 cr.)

Informatics

INFO I502 Prototyping
INFO I546 Music Information Processing: Symbolic
INFO I548 Introduction to Music Informatics
INFO I590 Topics in Informatics (when appropriate)

School of Library and Information Science

SLIS S516 Human-Computer Interaction (3 cr.)
SLIS S533 Online Searching (3 cr.)
SLIS S561 User Interface Design for Information Systems (1-3 cr.)
SLIS S604 Topics in Library and Information Science (1-4 cr.)
SLIS S637 Information Visualization (3 cr.)
SLIS S661 Information Usage and the Cognitive Artifact (3 cr.)

Linguistics

LING L503 Survey of Linguistics I (3 cr.)
LING L530 Introduction to Historical Linguistics (3 cr.)
LING L541 Introductory Phonetics (4 cr.)
LING L542 Phonological Analysis (3 cr.)
LING L543 Syntactic Analysis (3 cr.)
LING L544 Morphological Analysis (3 cr.)
LING L545 Computation and Linguistic Analysis (3 cr.)
LING L546 Semantics (3 cr.)
LING L611 Models of Linguistic Structure (3 cr.)
LING L614 Alternative Syntactic Theories (3 cr.)
LING L625 Bilingualism and Language Contact (3 cr.)
LING L630 Lexicology (3 cr.)
LING L641 Advanced Phonetics (3 cr.)
LING L642 Advanced Phonological Description (3 cr.)
LING L643 Advanced Syntax (3 cr.)
LING L645 Advanced Natural Language Processing (3 cr.)
LING L700 Seminar on Current Issues (when appropriate)
LING L710 Seminar in Acoustic Phonetics (4 cr.)
LING L712 Seminar in Phonology (4 cr.)
LING L714 Seminar in Syntax (4 cr.)
LING L780 Seminar in Structural Semantics (4 cr.)
LING T522 Survey of Applied Linguistics (3 cr.)
LING T532 Second-language Acquisition (3 cr.)
LING T632 Current Research in Second-Language Acquisition (3 cr.)
LING T711 Seminar in Applied Linguistics (4 cr.)

Mathematics

MATH M403-M404 Introduction to Modern Algebra I-II (3-3 cr.)
MATH M441-M442 Introduction to Partial Differential Equations with Applications I-II (3-3 cr.)
MATH M447-M448 Mathematical Models and Applications I-II (3-3 cr.)
MATH M463-M464 Introduction to Probability Theory I-II (3-3 cr.)
MATH M540-M541 Partial Differential Equations I-II (3-3 cr.)
MATH M544-M545 Ordinary Differential Equations I-II (3-3 cr.)
MATH M546 Control Theory (3 cr.)
MATH M548 Mathematical Methods for Biology (3 cr.)
MATH M560 Applied Stochastic Processes (3 cr.)
MATH M563-M564 Theory of Probability I-II (3 cr.)
MATH M568 Time Series Analysis (3 cr.)
MATH M569 Statistical Decision Theory (3 cr.)
MATH M571-M572 Analysis of Numerical Methods I-II (3-3 cr.)
MATH M584 Recursion Theory (3 cr.)
MATH M682 Model Theory (3 cr.)
MATH M781-782 Selected Topics in Mathematical Logic (3 cr.)

School of Music

MUS E519 Psychology of Music (3 cr.)
MUS E530 Learning Processes in Music (3 cr.)
MUS T561 Music Theory: Variable Topics (3 cr.) (when appropriate)

Near Eastern Languages and Cultures

NELC N524 Introduction to Arabic Linguistics (3 cr.)

Neural Science

NEUS N500 Neural Science I (4 cr.)
NEUS N501 Neural Science II (3 cr.)
NEUS N510 Cellular and Molecular Neuroscience (3 cr.)
NEUS N550 Seminar: Sensorimotor Neuroplasticity (3 cr.)
NEUS N611 Neural Basis of Sensory Function (3 cr.)
NEUS N613 Neural Mechanisms of Hearing (3 cr.)

School of Optometry

OPT V791 Quantitative Methods for Vision Research (3 cr.)

Philosophy

PHIL P505-P506 Logical Theory I-II (3-3 cr.)
PHIL P520 Philosophy of Language (3 cr.)
PHIL P550 Systems of Modal Logic (3 cr.)
PHIL P551 Philosophy and Foundations of Mathematics (3 cr.)
PHIL P552 Philosophy of Logic (3 cr.)
PHIL P560 Metaphysics (3 cr.)
PHIL P561 Philosophy of Mind (3 cr.)

PHIL P562 Theory of Knowledge (3 cr.)
PHIL P570 Philosophical Psychology (3 cr.)
PHIL P571 Philosophy of Nature (3 cr.)
PHIL P720 Seminar: Philosophy of Language (4 cr.)
PHIL P750 Seminar: Logical Theory (4 cr.)
PHIL P751 Seminar: Logic (4 cr.)
PHIL P760 Seminar: Metaphysics and Epistemology (4 cr.)

Political Science

POLS Y673 Empirical Theory and Methodology (3 cr.) (when appropriate)

Psychological and Brain Sciences

PSY P417 Animal Behavior (3 cr.)
PSY P435 Laboratory in Human Learning and Cognition (3 cr.)
PSY P438 Language and Cognition (3 cr.)
PSY P502 Developmental Psychology (3 cr.)
PSY P503 Complex Cognitive Processes (3 cr.)
PSY P506 Sensory Psychology (3 cr.)
PSY P507 Theories of Learning (3 cr.)
PSY P510 Principles of Research in Psychology (2 cr.)
PSY P514 Methods in Biopsychology (2 cr.)
PSY P517 Methods in the Direct Observation of Behavior (3 cr.)
PSY P526 Neurobiology of Learning and Memory (3 cr.)
PSY P527 Developmental Psychobiology (3 cr.)
PSY P528 Experimental Analysis of Economic Behavior (3 cr.)
PSY P553-P 554 Advanced Statistics in Psychology I-II (3-3 cr.)
PSY 555 Computer Applications in Psychological Research
PSY P557 Representation of Structure in Psychological Data (3 cr.)
PSY P564 Psychophysics (3 cr.)
PSY P565 Psychophysics of Vision (3 cr.)
PSY P595 First-Year Research Seminar
PSY P605 Introduction to Mathematical Psychology (3 cr.)
PSY P615 Developmental Psychology I (3 cr.)
PSY P620 Attitudes and Attitude Change (3 cr.)
PSY P623 Psychology of Language (3 cr.)
PSY P638 Experimental Psychology of Reading (3 cr.)
PSY P644 Attention and Short-Term Memory (3 cr.)
PSY P645 Learning and Long-Term Memory (3 cr.)
PSY P647 Decision Making Under Uncertainty (3 cr.)
PSY P648 Choice Behavior (3 cr.)
PSY P651 Perception/Action (3 cr.)
PSY P654 Multivariate Analysis (3 cr.)
PSY P657 Topical Seminar (when appropriate) (cr. arr.)
PSY P658-P659 Mathematical Models in Psychology I-II (4-4 cr.)
PSY P717 Evolutionary Bases of Learning (3 cr.)
PSY P747 Seminar in Cognitive Psychology (1-3 cr.)
PSY P820 Social Perception (3 cr.)

Slavic Languages and Literatures

SLAV L599 Prague School Linguistics and Poetics (3 cr.)

Sociology

SOC S650 Statistical Techniques in Sociology (3 cr.)
SOC S651 Topics in Quantitative Sociology (3 cr.)
SOC S652 Topics in Qualitative Methods (3 cr.)
SOC S656 Mathematical Applications in Sociology (3 cr.)
SOC S660 Advanced Topics (3 cr.) (when appropriate)
SOC S700 Topical Seminar (3-12 cr.) (when appropriate)

Speech and Hearing Sciences

SPHS S501 Neural Bases of Speech and Language (3 cr.)
SPHS S515 Topical Seminar in Speech Pathology (1-6 cr.)
SPHS S520 Theoretical Bases for Phonological Disorders (3 cr.)
SPHS S522 Digital Signal Processing (3 cr.)
SPHS S524 Survey of Children's Language Development (2 cr.)
SPHS S532 Early Communicative Development: Intervention Issues (3 cr.)
SPHS S534 Language Development in School Age Children (3 cr.)
SPHS S537 Diagnosis and Management of Adult Aphasia (2 cr.)
SPHS S538 Language Development in Atypical Populations: Learning Disabilities, Autism, and Mental Retardation (3 cr.)
SPHS S545 Adult Cognitive-Communication Disorders (3 cr.)
SPHS S550 Stuttering (2 cr.)
SPHS S555 Motor Speech Disorders (3 cr.)
SPHS S578 Audiological Instrumentation and Calibration (3 cr.)
SPHS S674 Advanced Seminar in Audiology (1-3 cr.)
SPHS S696 Language Research in Speech, Language, and Hearing Sciences (3 cr.)
SPHS S702 Acoustic Research in Speech (3 cr.)

Statistics

S682 Topics in Mathematical Statistics (when appropriate)

Telecommunications

TEL T552 Cognitive Approaches to Media (3 cr.)
TEL T571 Applied Cognitive and Emotional Psychology (3 cr.)
TEL T602 Topical Seminar in Telecommunications Processes and Effects (1-3 cr.)
TEL T641 Children and Media (3 cr.)

COGS–G 901 Advanced Research (6 cr.)

COGS–Q 520 Mathematics and Logic for Cognitive Science (3 cr.) Covers the mathematical backgrounds of contemporary work in cognitive science. Includes basic material on both the symbolic and connectionist approaches: machines, logics, networks, games, and probability.

COGS–Q 530 Programming Methods in Cognitive Science (3 cr.) P: Some programming experience. An introduction to computer programming methods for artificial intelligence and computer simulation of cognitive models. Emphasis on the necessary data structures and their applications to cognitive science. Programming projects may be related to state-space search for problem solving and game playing, production systems, and cognitive modeling tasks including memory models and neural simulations.

COGS–Q 540 Philosophical Foundations of the Cognitive and Information Sciences (3 cr.) Causal issues: cognitive architecture, physical embodiment, neuroscience, networks, dynamic systems. Semantic

issues: meaning, interpretation, representation, information flow. The role of both in language, logic, reasoning, action, perception, learning, categorization, and consciousness. Emphasis on writing, analysis, and exposition.

COGS–Q 550 Models in Cognitive Science (3 cr.) P: Q530 and Q560. An introduction to modeling in various areas of cognitive science, including computer simulation models of complex cognition, models within artificial intelligence, models based on neural mechanisms and networks, and formal and mathematical models in areas such as psychology, linguistics, and philosophy.

COGS–Q 551 The Brain and Cognition (3 cr.) An introduction to neural mechanisms underlying complex cognition, and a survey of topics in neuroscience related to cognition. It provides a solid background in human biopsychology.

COGS–Q 560 Experimental Methods in Cognitive Science (3 cr.) Specific goals of this course include: a) an understanding of experimental design and the resources for future studies; b) an understanding of converging measures and programmatic research; c) discussion of current controversies in experimental design; and d) hands-on experience in designing, conducting, and critiquing experiments.

COGS–Q 570 Behavior-Based Robotics (3 cr.) This course will present an overview of behavior-based robotics and its implications for embodied cognitive science, incorporating results from artificial intelligence, robotics, ethology, and psychology. It will give students an appreciation of the difficulties associated with implementing models on robots and allow them to tack research questions in groups.

COGS–Q 580 Introduction to Dynamic Systems in Cognitive Science (3 cr.) Introduction to linear and nonlinear dynamic systems including catastrophe and chaos theory. Main aspects include: a) understanding the basic quantitative theory and techniques of dynamic systems, b) illustration of major concepts and systems behavior with the aid of computer graphics and numerical software, and c) examples from cognitive science.

COGS–Q 689 Computer Simulation Project (3 cr.) The student will develop and test a computer simulation of some aspect of cognition. The student will produce a working, documented computer program, and a paper describing both the workings of the program and tests of the program (either theoretical tests, tests of the program against data, or both).

COGS–Q 700 Seminar in Cognitive Science (1–3 cr.) Intensive study of specific topics in cognitive science. Topics and instructors will change regularly.

COGS–Q 733 Colloquium Series (0–1 cr.) Three semesters at zero credits and one semester at one credit when the required colloquium is given by the student. The class will meet every week. At some meetings, invited speakers will present colloquia; at others, students will present their own work. Each student will be required to make a presentation at least once during the year the course is taken for credit.

COGS–Q 750 Neural Networks as Models of Cognition (3 cr.) Topical seminar featuring analysis of models based on neural networks. Will usually feature extensive exploration of one or more examples of models of this type.

COGS–Q 799 Readings and Research in Cognitive Science (1–6 cr.) Tutorial research and study in specialized topics in cognitive science.

COGS–Q 899 Dissertation Research (1–12 cr.) Dissertation research in specialized topics in cognitive science.

Communication and Culture

College of Arts and Sciences

Departmental E-mail: cmcl@indiana.edu

Departmental URL: www.indiana.edu/~cmcl

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy. Students develop individualized programs of study in consultation with a plan of study committee consistent with the department's interpretive focus on the relationship between communication and culture as manifested in and through the topics of rhetoric, media, performance, and ethnographic studies. Graduate students may also earn a Ph.D. minor that draws upon the department's focus on communication and culture.

Special Departmental Requirements

(See also general University Graduate School requirements and the departmental Graduate Handbook for additional information and detailed list of special requirements for specific degree programs.)

Master of Arts Degree

Admission Requirements

Undergraduate major in a communication-related discipline (e.g., communication and culture, rhetoric, film, media studies, etc.) or other liberal arts (e.g., English, history, anthropology), with evidence of adequate academic background for graduate study. Admission decisions are also based upon scores on the Graduate Record Examination General Test, undergraduate courses taken and grades received, a scholarly writing sample, a personal statement, and letters of recommendation.

Course Requirements

A total of 30 credit hours including: 6 credit hours from among C501, C502, and C503; 3 credit hours from among C505, C506, and C507; and 3 credit hours of C700 dedicated to the independent study of the departmental M.A. reading list. A minimum of 15 credit hours must be taken in courses numbered 500 and above; a maximum of 8 hours can be taken outside of the Department of Communication and Culture. In years when C501 is not offered students may substitute C511, C512, or C513.

Examination

Written M.A. examination based on departmental reading list is taken during the second year of course work.

Doctor of Philosophy Degree

Admission Requirements

M.A. degree in a communication-related discipline (e.g., rhetoric, communication and culture, film, media studies, etc.) or its equivalent in a related field such as anthropology, education, English, folklore, history, political science, psychology, or sociology. Admission decisions are based upon evidence such as scores on the Graduate Record Examination General Test, undergraduate and graduate courses taken and grades received, a scholarly writing sample, and letters of recommendation.

Course Requirements

A minimum of 90 credit hours, of which eight (3 or 4 credit hour) courses past the M.A. degree must be taken in the Department of Communication and Culture. Dissertation not to exceed 15 credit hours in C810. A minimum of 30 credit hours must be in courses numbered 500 and above.

Minor

Outside minor (typically 12–15 credit hours) required, which must be approved by the advisory committee. With approval of the advisory committee, a second minor may be taken.

Foreign Language Requirement

Reading proficiency in a foreign language. Demonstrated by course work or examination.

Qualifying Examination

Written and oral; may be taken twice only.

Ph.D. Minor in Communication and Culture

Requirements

A minimum of 12 credit hours of course work in communication and culture, including one course from C501, C502, and C503. Course work must be completed with a grade average no lower than B (3.0). In years when C501 is not offered, students may substitute C511, C512, or C513. Students may transfer a maximum of 3 hours from another university toward this degree with the approval of the director of graduate studies in the Department of Communication and Culture.

To arrange for the minor in communication and culture, students should consult with the director of graduate studies, who will recommend a member of the faculty to serve as an advisor. In consultation with the advisor, a program of study will be outlined, and a copy of the plan filed with the director of graduate studies.

Faculty

Chairperson

Professor Gregory A. Waller*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Richard Bauman* (Emeritus, Folklore and Ethnomusicology)

Chancellor's Professor

James Naremore* (Emeritus)

Professors

James Andrews* (Emeritus), Patricia Hayes Andrews* (Emeritus), Alex Doty*, Robert L. Ivie*, Barbara Klinger*, John Louis Lucaites*, Gregory A. Waller*, William E. Wiethoff*

Associate Professors

Chris Anderson*, Carolyn Ruth Calloway-Thomas*, Jane E. Goodman*, Joan C. Hawkins*, Phaedra C. Pezzullo*, Susan Seizer*, Jon Simons*, Robert E. Terrill*

Assistant Professors

Karen Bowdre, Stephanie De Boer, Ilana Gershon, Mary Louise Gray*, Michael Alan Kaplan, Susan Lepselter, Joshua Malitsky, Ted George Striphas*

Adjunct Professors

Peter Bondanella* (Emeritus, French and Italian), Sumie Jones* (Emerita, East Asian Languages and Cultures, Comparative Literature), Darlene Sadlier* (Spanish and Portuguese), Beverly Stoeltje* (Anthropology)

Director of Graduate Studies

Associate Professor Jon Simons*, 800 East Third Street, Room 239, (812) 856-0896

Courses

CMCL–C 501 Introduction to Rhetoric and Public Culture (3 cr.) A first course for students interested in exploring the relationship between rhetoric and public culture as manifest in modes of practical reasoning, the constitution and performance of self/society, and socio-political critique/judgment. Engages the connection between these modalities by focusing on the premodern and late or postmodern rhetorical theory as they implicate the problematics of contemporary social and political theory, including power, agency, ideology, hegemony, mediation, subjectivity, etc.

CMCL–C 502 Introduction to Performance in Communication and Culture (3 cr.) Introduction to various theories and methods of research in human communication studies. Includes theories of discourse and culture, message production and reception, symbol systems, social constructionism, relational communication, conversation analysis, social influence, communication competence, and other topics.

CMCL–C 503 Introduction to Media Theory and Aesthetics (3 cr.) Study of classical and contemporary theoretical texts.

CMCL–C 505 Productive Criticism of Political Rhetoric (3 cr.) Conceptualizes rhetoric as a mode of social critique while focusing on the problem of the scapegoat in public culture. Critically examines constructions of the threatening Other as they foster alienation and victimization within and between polities. Draws on Kenneth Burke's dramatism as a framework for rhetorical critique.

CMCL–C 506 Methods of Media Research (3 cr.) Introduction to research methods used in critical studies of media and culture.

CMCL–C 507 Methods of Ethnographic Research in Communication and Culture (3 cr.) Exploration of ethnographic research methods in the study of communication and culture, including the ethnography of performance, media, and public discourse. The emphasis is on qualitative methods; course work includes exercises in participant observation and interviewing.

CMCL–C 511 Premodern Rhetorical Theory (3 cr.) Survey of key texts, emphasizing rhetorical theory and practice, in the Greek and Latin traditions. Focus on contextualizing these materials within a continually developing intellectual history of rhetorical studies. Of particular interest is the potential for premodern theory to frame, interpret, and critique contemporary rhetorical practice.

CMCL–C 512 Rhetorical Theories of Cultural Production (3 cr.) Examines theories of rhetoric as a primary source of cultural production. Features Giambattista Vico on eloquence, tropes, and the poetic wisdom of culture; Friedrich Nietzsche on rhetoric, metaphor, and the will to power; Chaim Perelman on the realm of rhetoric and the problem of justice; and Kenneth Burke on rhetoric, identification, and the drama of human relations.

CMCL–C 513 Rhetoric and Sociopolitical Judgment (3 cr.) Exploration of the role that rhetoric plays in the production and performance of collective or socio-political judgment. The focus will be on the tension between modern and late or postmodern conceptions of judgment as they implicate the problems and possibilities of rhetorical praxis (i.e., negotiating the relationship between knowledge, understanding, and action) in contemporary democratic policy.

CMCL–C 545 Introduction to Pedagogy in Communication and Culture (3 cr.) Fundamentals of teaching as applied to communication. Focuses on teaching methods and culture, criticism, communication apprehension, textbook selection, test construction, gender in the classroom, and the place of communication and culture in the liberal arts and sciences.

CMCL–C 552 Media Institutions and the Production of Culture (3 cr.) Study of media institutions, work practices, products, and their relationships with their sociopolitical environment.

CMCL–C 560 Motion Picture Production (3–4 cr.) Introduction to 16mm film production including cinematography, editing, and sound.

CMCL–C 561 Intermediate Motion Picture Production (4 cr.) P: CMCL C560. Introduces students to the making of 16 mm sound films, including the recording and editing of synch sound. The various stages of production are explored in lectures, lab exercises, and discussions. Each student designs, directs, and edits a short synch sound film and participates as a crew member in the other students' productions.

CMCL–C 562 The Screenplay (3 cr.) Terminology of screenwriting and form of the screenplay. Development of the screenplay from story outline and treatment to the shooting script. The original screenplay. Techniques of adaptation. Contributions of the screenwriter to the mise-en-scène. Exercises in screenwriting; culmination in the writing of a full-length original screenplay or adaptation. Department is not currently offering this course.

CMCL–C 592 Media Genres (3 cr.) Topic varies: the evaluation of typical genres; problems of generic description of definition; themes, conventions, and iconography peculiar to given genres, etc.

CMCL–C 593 History of European and American Films I (3 cr.) Survey of the development of cinema 1895-1926 (silent film era). Particular attention on representative work of leading filmmakers, emergence of film movements and development of national trends, growth of film industry, and impact of television.

CMCL–C 594 Media History (3 cr.) Media historiography, topics in national history, national and international movements and trends. Topic varies.

CMCL–C 596 National Cinemas (3 cr.) Topic varies: historical survey of major national cinemas. Topics may include Brazilian cinema, French national cinema, German film culture, Italian cinema, Indian cinema, and others.

CMCL–C 604 Topical Seminar in Mass Communication and Culture (1–3 cr.) P: Consent of instructor. Department is not currently offering this course.

CMCL–C 606 Media Criticism (3 cr.) Study of the main schools and methods of media criticism.

CMCL–C 608 Images and Critique in Public Culture (3 cr.) This course examines and assesses some contemporary critical thought about visual and non-visual images, especially the role of images in politics. As well as pursuing various strategies for the ideology critique of images, the course explores the possibility of thinking critically through images. It studies different types of images through a variety of theoretical approaches and thematic questions.

CMCL–C 610 Identity and Difference (3 cr.) Political, social, and cultural dimensions of identity and difference. Interrogates the production of marginal and dominant identities (e.g., racial, sexual, colonial) and the emergence of new forms of identification.

CMCL–C 611 Topics in Rhetoric and Public Culture (3 cr.) Systematic review of research related to a specific issue or area in rhetoric and public culture.

CMCL–C 612 Constituting Democracy in Rhetorical Discourse (3 cr.) Compares the role of rhetoric in liberal, deliberative democracy to its function in radical, participatory, and agonistic democracy. Considers problematic constructions of democracy in U.S. political culture and their relationship to exaggerated perceptions of national vulnerability. Explores the rhetorical potential of myth and metaphor for reconstituting the image of democracy from a diseased to a healthy political practice.

CMCL–C 614 Rhetoric, Ideology, and Hegemony (3 cr.) Examination of the relationship between rhetoric, ideology, and hegemony in contemporary social and political thought. The emphasis will be on conceptions of hegemony as a site of praxis for negotiating the tensions between rhetoric and ideology in the production of social and political change (or permanence) in late or post-

modernity. Primary readings will draw from twentieth-century rhetorical theory, Marxism, critical theory, and psychoanalysis.

CMCL–C 615 Rhetoric of Protest in America (3 cr.) Presents key instances of protest discourse both in their historical contexts and through the lenses of rhetorical theories of dissent. The focus is on illuminating the problematic and constitutive role of protest in the public culture of the United States, as manifested across a range of electronic and print media. The American Revolution, southern secession, feminisms, black liberation, and gay/lesbian rights will receive particular attention.

CMCL–C 616 Rhetorical Critiques of War (3 cr.) Rhetoric as an heuristic for critically engaging discourses of war and transforming the legitimization of war into a cultural problematic. Focuses on the problem of war in U.S. political culture.

CMCL–C 617 Rhetoric and Visual Culture (3 cr.) Examination of the relationship between rhetoric and visual culture. Key topics to be considered include: the relationship between visual rhetoric and collective memory, social and political controversy and dissent, political style and representation, postmodern media communities, race, gender, identity politics, etc.

CMCL–C 619 Feminism and Rhetorical Theory (3 cr.) This seminar explores the relationship between feminism and rhetoric by examining advocacy by/for women, patriarchal patterns of oppression, and the development of critical perspectives that have arisen out of desires to politically reevaluate contemporary gendered norms. It may be structured as a survey of a wide range of intersections between feminisms and rhetorical theory; or as an in-depth critical engagement with a specific tension, theme, or trajectory, such as “the body.”

CMCL–C 620 Media, Politics, and Power (3 cr.) Examination of media institutions (including new media) through various schools of thought.

CMCL–C 622 Advanced Pedagogy (3 cr.) P: C545 or equivalent. This advanced pedagogy seminar will investigate theories of learning and academic practice. Topics will vary by semester.

CMCL–C 626 Studies in Contemporary Communication (3 cr.) Systematic review of research related to contemporary problems in the study of communication; may be theoretical, methodological, or critical. Topic varies.

CMCL–C 627 Performance in Communication and Culture (3 cr.) Critical examination of performance as a vantage point on communication and culture in specific societies, world areas, or social formations. Topic varies.

CMCL–C 634 Networks, Systems, and Flows (3 cr.) This course looks at contemporary theoretical approaches to how knowledge and objects travel. Readings in current theories of circulation address the categories used to conceptualize circulation and distribution, such as networks, systems, and flows.

CMCL–C 635 Humor in Use (3 cr.) Beginning from the premise that humor is a good site for the study of culture, this course looks at a range of cultural contexts for humor, from staged public performance to private joking, and is primarily concerned with the many and varied social uses to which humor is put.

CMCL–C 636 Reading the Text (3 cr.) This seminar hones students’ skills of close reading, explication and commentary, textual analysis and interpretation, in relation to one or two books central to the academic study of communication and culture. The books studied will be determined in each iteration of the seminar.

CMCL–C 637 Publics (3 cr.) How can we understand the different ways that publics are composed? This course looks at how one analyzes texts, events and social groups when focusing on publics.

CMCL–C 645 Topics in the Comparative Study of Communication and Culture (3 cr.) Analysis of communicative forms and practices in comparative perspective. Topic varies.

CMCL–C 646 Pedagogy Practicum (1 cr.) Taken by associate instructors in communication and culture who are pursuing a three-course sequence leading to the Certificate of Pedagogy. Students in C646 will be assigned a faculty mentor who will work with them as they prepare to teach a departmental course that is not under the supervision of a course director.

CMCL–C 650 Ethnography & Social Theory (3 cr.) Scholars build social theory through the analysis of social life and communicative practices. Ethnography is a key vehicle through which theory can be developed. By pairing theoretical and ethnographic works, the course offers a grounding in contemporary social theory and explores how ethnography can develop, hone, or complicate theory.

CMCL–C 652 Globalization of Media (3 cr.) Explores media institutions, practices, and texts across national borders. Topic varies. May examine particular issues such as globalization of media, transnational implications of media texts, transnational data flows, media and foreign policy.

CMCL–C 660 Advanced Film Production (4 cr.) Designed for students who have taken basic production classes and who want to embark on a more ambitious film or video project. Each student will produce one product from script to screen, and assist other students on their projects. Course will address creative, technical, and production management questions.

CMCL–C 661 Environmental Communication and Public Culture (3 cr.) This seminar focuses on how nature and the environment more broadly understood is articulated, represented, and engaged within public culture. Assuming symbolic and natural systems are mutually constituted, this course aims to foster a closer examination of communication practices that impact the environment and cultural perceptions of it such as tourism, social movement advocacy campaigns, corporate and government discourses, popular media, and public participation in decision-making processes.

CMCL–C 662 Media Audiences (3 cr.) This course studies audiences in the context of film, television, new media, and other media forms. Topic varies, but may include a focus on theories of spectatorship, methodological approaches to audiences, historical reception studies, ethnographic and/or empirical audience

studies, global or transnational audiences, performance theory, fan cultures, and subcultures.

CMCL–C 670 Rhetoric in Contemporary Theory (3 cr.) Examines the role of rhetoric in emerging social, political, aesthetic, and cultural theories and on the implications of such theories for rhetorical inquiry.

CMCL–C 688 Rhetorics of Transgression and/or Resistance (3 cr.) This seminar compares and contrasts choices to identify, name, and imagine certain rhetorical acts as transgression or resistance. Engaging a range of contemporary theories, methods, and vocabularies, it explores which approaches are productive depending on the particular situation, practices, and actors involved, as well as the questions one is studying.

CMCL–C 690 Theories of Symbolic Meaning (3 cr.) P: Linguistics L503 or consent of instructor. Intensive study of referential, behavioral, rule-governed, and cognitive theories of symbolic meaning, with attention to comprehension of words, utterances/sentences, and extended discourse. Department is not currently offering this course.

CMCL–C 691 Authorship in Media (4 cr.) In-depth analysis of individuals in the media who become known as "authors."

CMCL–C 700 Research (1–4 cr.) P: Consent of instructor. This course is eligible for a deferred grade Students must have ample preparation in some theoretical area and in one or more research methods. Designed to allow students to conduct a research study, including the collection and examination of data (broadly defined), to answer a question, to prove a thesis, or to test a hypothesis relating to communication/rhetorical theory.

CMCL–C 701 Practicum in Communication Research (3 cr.) P: Consent of instructor. Consent of instructor. Students must have ample preparation in some theoretical area and in one or more research methods. Designed to allow students to conduct a research study, including the collection and examination of data (broadly defined), to answer a question, to prove a thesis, or to test a hypothesis relating to communication/rhetorical theory.

CMCL–C 705 Research Seminar in Rhetoric and Public Culture (3 cr.) Problems and issues in rhetoric and public culture.

CMCL–C 706 Theories of Performance in Communication and Culture (3 cr.) Critical examination of theoretical problems in the study of performance in communication and culture. Topic varies.

CMCL–C 710 Theories of Performance in Communication and Culture (1–3 cr.) Department is not currently offering this course.

CMCL–C 727 Seminar in Cross-Cultural Communications (3 cr.)

CMCL–C 790 Seminar: Pragmatic Functions of Language (3 cr.) P: C501 and C502, or consent of instructor. Study of research dealing with the correlates of language variation, including topics such as language clarity, intensity, obscenity, style, dialects, interactions of language with perception/cognition and mental health, and the constituents of pragmatic language competence. Department is not currently offering this course.

CMCL–C 792 Advanced Seminar in Media Theory (3 cr.) Topic varies: advanced study in media history and theory; major movements and historical periods and their relationship to the intellectual and cultural climate of the time; studies of technology and modes of production; advanced work in genre or auteur studies; close reading of major works of media theory; new developments in theory and criticism.

CMCL–C 793 Seminar in Media (3 cr.) Topics in media studies.

CMCL–C 800 M.A. Thesis (arr. cr.)

CMCL–C 810 Ph.D. Thesis (arr. cr.) This course is eligible for a deferred grade.

Comparative Literature

College of Arts and Sciences

Departmental E-mail: complit@indiana.edu

Departmental URL: www.indiana.edu/~complit

Curriculum

Degrees Offered

Master of Arts, dual Master of Arts/Master of Library and Information Science, Master of Arts for Teachers, and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

For details about departmental rules and procedures, consult the current Comparative Literature Handbook, available upon request from the Graduate Studies Office, Ballantine Hall 913A.

Admission Requirements

Graduate Record Examination General Test required. For the Ph.D., fluent reading knowledge of at least two foreign languages. For the M.A., fluent knowledge of at least one foreign language. Deficiencies in undergraduate work and foreign languages must be removed within one year. Only students holding the M.A. or its equivalent will be considered for direct admission to the Ph.D. program. (Note: Students admitted on a provisional basis must present proof of completion of the B.A. or M.A. upon their arrival at Indiana University.)

Master of Arts Degree

Course Requirements

A minimum of 30 credit hours, 20 credit hours of which must be in comparative literature, including C501, C502, one course on European literature in the premodern period (C505, C521, C523, or C525), one course on European literature in the modern period (C506, C529, C533, C535, C537, or C538), and one proseminar. With the consent of the instructor, any full course in Comparative Literature other than C501, C502, and C507 may be designated a proseminar. Consult the Comparative Literature Handbook for details. M.A. students must complete a proseminar chosen from the

graduate courses in Comparative Literature that students have not used to fulfill the other course requirements.

Language Requirements

Reading proficiency in two foreign languages. Proficiency may be certified by: (1) receiving a grade of B or higher in a graduate-level literature course in which the assigned readings are in the foreign language, or (2) passing an examination in translation and explication of literary texts in the foreign language administered by the Department of Comparative Literature in consultation with faculty in other departments. Successful completion of the 491/492 course sequence in a foreign language will not be accepted as certification of reading proficiency. Students whose native language is not English and who have passed the proficiency test administered by the Center for English Language Training may request certification of English as one of their foreign languages.

Master's Project

There are three ways to meet the master's project requirement: (1) by revising or expanding a suitable term or seminar paper as a master's essay; (2) by writing an original master's essay; or (3) by writing a formal master's thesis. Consult the Comparative Literature Handbook for details. The requirement should normally be fulfilled no later than the end of the fourth semester after beginning graduate studies in comparative literature at Indiana University. Consult the Comparative Literature Handbook for details.

Dual Master of Arts Degree

Students admitted to the dual Master of Arts program may obtain M.A. degrees in comparative literature and a related field with fewer credits than would be required if the two degrees were taken separately. Consult the Comparative Literature Handbook for details.

Dual Master's Degree in Comparative Literature and the School of Library and Information Science (M.A./M.L.S.) The joint program consists of a total of at least 50 credit hours: a minimum of 30 credit hours in Library and Information Science, and a minimum of 20 credit hours in Comparative Literature. Consult the Comparative Literature Handbook for details.

Master of Arts for Teachers Degree

Admission Requirement

B.A. degree in comparative literature or an individual literature.

Course Requirements

A total of 36 credit hours, 20 of which must be in comparative literature, including C501, C502, one course on European literature in the premodern period (C505, C521, C523, or C525), and one course on European literature in the modern period (C506, C529, C533, C535, C537 or C538).

Language Requirement

Certification of reading proficiency in one foreign language.

Examination

A 90-minute written examination analyzing two texts drawn from an approved reading list. One text may be a work of art in a nonliterary medium. If both texts are written, one must be in a foreign language.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including 65 credit hours of course work, of which 35 credit hours must be in comparative literature, including C501, C502, one course on European literature in the premodern period (C505, C521, C523, or C525), one course on European literature in the modern period (C506, C529, C533, C535, C537, or C538), and one proseminar. With the consent of the instructor, any full course in Comparative Literature other than C501, C502, and C507 may be designated a proseminar. Consult the Comparative Literature Handbook for details. Ph.D. students must complete a proseminar chosen from the graduate courses in Comparative Literature that students have not used to fulfill the other course requirements. The dissertation must not exceed 25 research credit hours.

Language Requirements

Reading proficiency in three foreign languages. Proficiency may be certified by: (1) receiving a grade of B or higher in a graduate-level literature course in which the readings are in the foreign language, or (2) passing an examination in translation and explication of literary texts in the foreign language administered by the department. Successful completion of the 491-492 course sequence in a foreign language will not be accepted as certification of reading proficiency. Students whose native language is not English and who have passed the proficiency test administered by the Center for English Language Training may request certification of English as one of their foreign languages. With the permission of the director of graduate studies, doctoral students may be allowed to substitute intensive preparation (at least 27 credit hours) in a nonliterary discipline for the third foreign language.

Minor

A minimum of 12 to 15 credit hours in an outside field selected in consultation with the Director of Graduate Studies. Requirements are set by the department or program administering the minor. Students have the option of taking a second minor or of completing an intensive minor with a minimum of 24 credit hours. Two minors (subject concentrations), usually at least 12 credit hours each, or a single intensive minor, usually at least 24 credit hours.

Qualifying Examination

One written exam on three topics (areas). The examination will take into account work done in the minor field(s). At the student's request, one part may be written in a foreign language. Oral examination will follow.

Final Examination

Oral defense of dissertation.

Ph.D. Minor in Comparative Literature

Four courses in comparative literature, including C501; fluent reading knowledge of at least one foreign language.

Ph.D. Minor in Literary Theory

Jointly administered by the Comparative Literature Program and the Department of English, the minor

requires a minimum of three courses, including at least one selected from Comparative Literature C503, C504, C601, or C602; and one from English G660, L605, L607, L608, or L707. Other courses approved for the minor include French and Italian F564 and F584; Germanic Studies G505; Slavic Languages and Literatures R598; Spanish and Portuguese S473 and S512; and Theatre and Drama T555 and T556. Other courses may also be acceptable toward completion of the requirement; written consent to count such courses must be obtained in advance from the graduate advisor in the Comparative Literature Program or the Department of English.

Ph.D. Minor in Biblical Literature

See this bulletin under Institute for Biblical and Literary Studies.

Graduate Certificate in Literary Translation

Course Requirements

Twenty-one (21) to 24 credit hours, including C580 History and Theory of Translation; C581 Workshop in Literary Translation; one other workshop in translation; and three further courses in Comparative Literature or one of the foreign language departments, consisting either of graduate-level literature courses using original-language texts or advanced courses (300 level or above) in the language itself. In exceptional cases, the student may petition the Translation Studies Committee to accept, in lieu of one or more of these courses, other evidence of advanced knowledge of the language, such as extensive undergraduate or overseas training or educated native proficiency.

Language Requirements

In-depth knowledge of English and one other language.

Translation Project

Translation of a literary or scholarly work or works into or from English, accompanied by an introductory essay. If the translation project is completed in partial fulfillment of the M.A. degree, the guidelines for the M.A. degree pertain. For further details consult the current Comparative Literature Handbook.

Faculty

Chairperson

Professor Bill Johnston*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Martha C. Kraft Professor of Humanities

Fedwa Malti-Douglas* (Gender Studies)

Chancellor's Professor

Anya Peterson Royce* (Anthropology)

Professors

David M. Hertz*, Eileen Julien* (French and Italian, African American and African Diaspora), Fedwa Malti-Douglas, Herbert J. Marks (English, Near Eastern Languages & Cultures, Religious Studies)*, Rosemarie McGerr*, B. Breon Mitchell* (Germanic Studies), Anya Peterson-Royce* (Anthropology)

Associate Professors

Vivian Halloran*, Bill Johnston* (Second Language Studies, Polish Studies), Paul Losensky* (Central Eurasian Studies), Angela C. Pao*, Eyal Peretz

Assistant Professors

Akinwumi Adesokan, Shun-Chang Tsai, Sarah Vanderlaan

Adjunct Professors

Maryellen Bieder* (Spanish and Portuguese), J. Peter Burkholder* (Music), Karen Hanson* (Philosophy), Douglas Hofstadter* (Distinguished Professor, College Professor, Computer Science, Cognitive Sciences), Dov-Ber Kerler* (Germanic Studies), Barbara Klinger* (Communication and Culture), Eleanor W. Leach* (Classical Studies), Eric MacPhail* (French and Italian), William Rasch* (Germanic Studies), Suzanne Stetkevych* (Near Eastern Languages and Cultures), H. Wayne Storey* (French and Italian, Medieval Studies), Marc Weiner* (Germanic Studies)

Adjunct Associate Professors

Purnima Bose* (English, Cultural Studies), Fritz Breithaupt* (Germanic Studies), Michel Chaouli* (Germanic Studies), Deborah Cohn* (Spanish and Portuguese), Patrick Dove* (Spanish and Portuguese), Joan Hawkins* (Communication and Culture), Rebecca Manring* (India Studies, Religious Studies), Edith Sarra* (East Asian Languages and Cultures), Rakesh Solomon* (Theatre and Drama)

Adjunct Assistant Professor

Johannes Turk* (Germanic Studies)

Professors Emeriti

Salih Altoma* (Near Eastern Languages and Cultures), Willis Barnstone* (Distinguished Professor, Spanish and Portuguese), Luis Beltrán* (Spanish and Portuguese), Ernest Bernhardt-Kabisch* (English), Peter Boerner* (Germanic Studies), Peter Bondanella* (Distinguished Professor, French and Italian), Gilbert Chaitin* (French and Italian), Claus Clüver*, Bruce Cole* (Distinguished Professor, Fine Arts/History), Eugene Eoyang* (East Asian Languages and Cultures), Harry Geduld*, Kenneth R. R. Gros Louis* (English), Ingeborg Hoesterey* (Germanic Studies), Yoshio Iwamoto* (East Asian Languages and Cultures), Sumie A. Jones* (East Asian Languages and Cultures), Oscar S. Kenshur* (English, Philosophy), Gerald Larson* (Religious Studies and India Studies), Merritt Lawlis* (English), Giancarlo Maiorino* (Rudy Professor), Mihály Szegedy-Maszák* (Central Eurasian Studies), Jack Rollins (Honors), Bronislava Volkova (Slavic Languages & Literatures), Ulrich Weisstein* (Germanic Studies), Carl Ziegler (Associate Professor, Germanic Studies)

Director of Graduate Studies

Eyal Peretz*, Ballantine Hall 921, (812) 855-9602 or (812) 856-6009

Courses

Courses Required for M.A. and Ph.D. Programs

CMLT–C 501 Introduction to Contemporary Literary Studies (3 cr.) Introduces major questions and ideas about the nature of literature and the principles and methods of its study.

CMLT–C 502 Fields and Methods of Comparative Literature (1 cr.) Explores the various disciplines and approaches that constitute the practice of comparative literature at Indiana University and introduces their methods and bibliographical resources. Faculty members will lecture on their specialties.

Theoretical and Interdisciplinary Courses

CMLT–C 503 Topics in World Criticism and Theory I (4 cr.) Selections from critics, theorists, and critical and theoretical movements before 1750 from an intercultural perspective.

CMLT–C 504 Topics in World Criticism and Theory II (4 cr.) Selections from critics, theorists, and critical and theoretical movements after 1750 from an intercultural perspective.

CMLT–C 545 The Bible and Western Literature (4 cr.) Questions of authority, unity, canonicity, and interpretive license studied with reference to selected texts from the Western tradition and their biblical source.

CMLT–C 546 Sexuality and the Arts (4 cr.) Beginning with a general introduction to methodology, examines human sexuality as manifested in various cultures, literatures, and areas of the arts.

CMLT–C 555 Theory and Methods of Interarts Studies (4 cr.) The interrelations of literature, music, dance, and the visual arts, with an emphasis on questions of representation, symbolic structure, intersemiotic transposition, illustration, period, style, hybrid and multi-media forms, and general method. Topics may vary.

CMLT–C 601 Studies in the History of Theory and Criticism (4 cr.) Topic varies.

CMLT–C 602 Contemporary Theoretical Issues and Approaches (4 cr.) Topic varies.

CMLT–C 641 Literature in Its Intellectual and Cultural Contexts (4 cr.) Topic varies.

CMLT–C 643 Literary Studies and the Social Sciences (4 cr.) Topic varies: e.g., politics and the novel, new historicism, the theory of ideology.

CMLT–C 644 Literary Studies and Psychoanalysis (4 cr.) Topic varies: e.g., Freud and literature, Lacan and literary theory.

CMLT–C 645 Literary Studies and Religion (4 cr.) Topic varies.

CMLT–C 647 Literary Studies and Philosophy (4 cr.) Topic varies.

CMLT–C 649 Literary Studies and the Natural Sciences (4 cr.) Topic varies: e.g., science and the theory of interpretation; the aesthetics of evolution.

CMLT–C 655 Topics in Interarts Studies (4 cr.) Topic varies.

CMLT–C 692 Comedy in Film and Literature (4 cr.) Styles and techniques of film comedy from the beginnings of cinema to the present. Theories of comedy and humor; relationship to comedy in fiction, drama, pantomime, circus, and vaudeville.

CMLT–C 693 Film Adaptations of Literature (4 cr.) Analysis of the processes and problems involved in turning a literary work (novel, play, or poem) into a screenplay and then into a film. Close study of literary and film techniques and short exercises in adaptation.

CMLT–C 790 Studies in Film and Literature (4–12 cr.) Topic varies: e.g., cinema and the theory of narrative; literary adaptation in cinema; relation of cinematic and literary movements (e.g., surrealism, expressionism).

Period Courses

CMLT–C 505 Western Literary and Intellectual Traditions to 1500 (4 cr.) Classical, biblical, and medieval texts.

CMLT–C 506 Western Literary and Intellectual Traditions After 1500 (4 cr.) An historical overview, discussing a wide range of texts.

CMLT–C 521 Ancient Greek and Roman Literature (4 cr.)

CMLT–C 523 Medieval Literature (4 cr.)

CMLT–C 525 The Renaissance and Seventeenth Century (4 cr.)

CMLT–C 529 The Eighteenth Century (4 cr.)

CMLT–C 533 Romanticism (4 cr.)

CMLT–C 535 The Later Nineteenth and Early Twentieth Centuries (4 cr.)

CMLT–C 537 The Twentieth Century I (4 cr.) Early and middle twentieth century.

CMLT–C 538 The Twentieth Century II (4 cr.) Late twentieth century to the present.

CMLT–C 630 Studies in Literary History (4 cr.)

Genre Courses

CMLT–C 511 Drama (4 cr.)

CMLT–C 513 Narrative (4 cr.)

CMLT–C 515 Lyric (4 cr.)

CMLT–C 516 Non-Narrative Prose (4 cr.)

CMLT–C 610 Studies in the Theory of Genres (4 cr.)

CMLT–C 611 Topics in Literary Genres, Modes, and Forms (4 cr.)

Cross-Cultural Studies

CMLT–C 571 Africa in the History of Ideas (4 cr.)

CMLT–C 572 Modern African Letters (4 cr.)

CMLT–C 573 Comparative Topics in Middle Eastern and Western Literatures (4 cr.)

CMLT–C 575 Topics in East-West Comparative Studies (4 cr.) Topic varies.

CMLT–C 576 Comparative Approaches to Chinese Literature (4 cr.)

CMLT–C 670 Topics in Cross-Cultural Studies (4 cr.)

Translation Studies

CMLT–C 580 History and Theory of Translation (4 cr.)

CMLT–C 581 Workshop in Literary Translation (4 cr.)

CMLT–C 680 Topics in Translation Studies (4 cr.)

Research, Teaching, and General Topics

CMLT–C 507 Teaching Methods in Comparative Literature (3 cr.) The presuppositions, methods, and goals of teaching literature. Topics include literature and composition, cross-cultural approaches, translation studies, comparative arts, literary theory, and technological resources. Practice in developing courses, assignments, and classroom strategies.

CMLT–C 508 Teaching Literature and Composition (1 cr.)

CMLT–C 509 Teaching Internship in Comparative Literature (1 cr.)

CMLT–C 603 Topics in Comparative Literature (4 cr.)

CMLT–C 604 Individual Readings in Literature (1–4 cr.) Arranged with an individual member of the department. Faculty authorization is required.

CMLT–C 801 Research (arr. cr.) This course is eligible for a deferred grade.

CMLT–C 805 Master's Thesis (arr. cr.) This course is eligible for a deferred grade.

CMLT–C 810 Ph.D. Thesis (arr. cr.) This course is eligible for a deferred grade.

Cross-Listed Courses

English

L607 History of Literary Criticism to the Enlightenment (4 cr.)
L608 History of Literary Criticism from 1750 to 1960 (4 cr.)

French and Italian

F564 Issues in Literary Theory (3 cr.)
F647 Contemporary French Theory and Criticism (3 cr.)

Slavic Languages and Literatures

R505-R506 Nineteenth-Century Russian Literature I-II (3-3 cr.)

Theatre and Drama

T555-T556 Drama Theory I-II (3-3 cr.)
T567 European Drama from Molière to Ibsen (3 cr.)
T571 Studies in Renaissance and Baroque Theatre (3 cr.)
T662 Comparative Theatre and Drama: Melodrama (3 cr.)

Computer Science

School of Informatics and Computing

Program E-mail: info@cs.indiana.edu

Program URL: www.cs.indiana.edu

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Admission to all graduate programs is by approval of the school's graduate admission committees. Requirements for admission: baccalaureate degree (not necessarily with a concentration in computer science) and Graduate Record Examination (subject test also desirable). Undergraduate course prerequisites may be satisfied by equivalent or more advanced courses, and in some cases by professional experience. Prerequisites common to all graduate requirements are course work in computer structures and organization, discrete structures and computing theory, and data structures.

Master of Science Degrees

(See School of Informatics and Computing Bulletin)

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours of graduate-level course work is required. These courses are defined as any course listed in this bulletin that carries graduate credit. Note that no computer science courses in the A500-A598 range may be counted toward the 90 credit-hour requirement or toward the 24 credit-hour requirement specified as follows.

Computer Science Course Requirements

Ph.D. candidates must take at least 24 credit hours, normally eight courses, in computer science at the 500 level or above, subject to the following conditions:

1. P requirement: At least one must be a P course, with a substantial programming or software development component.
2. Essentials requirements: Of the eight courses, there must be at least one course in Foundations/Logic (indicated by middle digits 0/1) and one course in Software/Hardware Systems (indicated by middle digits 3/4). Both of these courses must be passed with a minimum grade of B+.
3. Area distribution requirements: Of the eight courses, there must be at least one course each in six of the nine areas (indicated by the middle digit 0-8 in advanced computer science courses).
4. Research course conditions: The Y790 course is excluded from these six area courses and cannot fulfill the P requirement, but up to 6 hours of Y790 may be counted toward the 24 credit-hour requirement. Y890 and G901 are excluded from the 24 credit hours in this requirement.
5. A grade average of B (3.0) is required for computer science courses, in addition to the University

Graduate School's requirement of a B (3.0) average for all courses taken.

Minor Area Requirement

Three options are available:

1. An external minor awarded by another Indiana University department or graduate program approved by the Computer Science Program.
2. An internal minor: 9 computer science credits, in courses other than reading and research, and in an area other than the student's specialization. The area and the courses must be approved by the student's advisory committee. These 9 credits cannot be counted toward the six-course requirement.
3. An individualized interdisciplinary minor, as prescribed by this bulletin: at least 12 credits spanning at least two departments, to be recommended by the student's advisory committee and approved by the dean in advance of any course work.

Qualifying Examination

The qualifying examination is given by the first semester of the student's third year in the program. This examination is administered by the advisory committee and is expected to have a written and an oral component.

Thesis Proposal

Given after completion of the qualifying examination, consisting of an oral presentation of a written research plan for the dissertation. This examination is given by the research committee.

Dissertation

A written elaboration of significant original research, which must be successfully presented to the research committee in a defense of dissertation as described in this bulletin.

Ph.D. Minor in Computer Science

Doctoral students in other departments may complete a minor in computer science by satisfying one of the following options:

1. Three computer science courses totaling not fewer than 9 credit hours at the 500 level or above. A500-level courses and 400-level courses are excluded with these exceptions: A595 (B401), B403, P423, P436, P438, B441, P442, and B443 are approved for graduate credit toward the Ph.D. minor.
2. A593, A594, and any two courses totaling 6 credit hours or more from the list: A595, A596, plus the computer science courses meeting the requirements of the first option.

Faculty

Dean

Robert Schnabel*

Associate Dean of Graduate Studies and Research

Geoffrey C. Fox*

Director of Graduate Studies

Amr Sabry*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

College Professor of Cognitive Science and Computer Science; Distinguished Professor of Computer Science

Douglas R. Hofstadter*

Professors

Randall Beer*, Randall Bramley*, Geoffrey Brown*, J. Michael Dunn* (Emeritus), R. Kent Dybvig*, Geoffrey C. Fox*, Daniel P. Friedman*, Stanley Hagstrom* (Emeritus), Andrew J. Hanson*, Douglas R. Hofstadter*, Steven D. Johnson*, David B. Leake*, Daniel M. Leivant*, Andrew Lumsdaine*, Michael A. McRobbie*, Franklin Prosser* (Emeritus), Paul W. Purdom*, Edward L. Robertson* (Emeritus), Amr A. Sabry*, Robert B. Schnabel*, George Springer* (Emeritus), Dirk Van Gucht*, David E. Winkel* (Emeritus), David S. Wise* (Emeritus)

Associate Professors

Kay Connelly*, Michael Gasser*, Christopher T. Haynes*, Filippo Menczer*, Jonathan Mills*, Beth A. Plale*, Gregory J. E. Rawlins*, Matthias Scheutz*

Assistant Professors

Amal Ahmed*, Arun Chauhan*, Minaxi Gupta*, Kris Hauser*, Raquel Hill*, Yuqing Melanie Wu*

Adjunct Professors

David McCarty* (Philosophy), Larry Moss* (Mathematics), Gerardo Ortiz* (Physics), Robert Port* (Emeritus, Linguistics), Michael Trosset* (Statistics)

Adjunct Associate Professor

Chen Yu* (Psychology)

Courses

CSCI–A 504 Introductory C++ Programming (2 cr.) P: Programming experience. Topics include aspects of C++ that are not object-oriented, basic data structures, standard libraries, and Unix tools for project management. Credit not given for both A504 and either A304, A597, A592, C212, H212, or BUS K201. Program is not currently offering this course.

CSCI–A 506 Object-Oriented Programming in C++ (2 cr.) P: Either A201, A304, A504, or A597. Topics include objects, classes, encapsulation, inheritance, polymorphism, templates, and exceptions. Credit not given for both A506 and either A306, A202, A592, A598, C212, or H212. Program is not currently offering this course.

CSCI–A 521 Computing Tools for Scientific Research (3 cr.) C: Math 118 or higher required; Math M211 recommended. Introduction to computer-based tools useful for analysis and understanding of scientific data. Basic methods of computation, data processing, and display in systems such as Matlab combined with elementary practical C/C++ programming. Techniques

to support customized scientific research tasks, with particular emphasis on biological, neural, and behavioral sciences. Lecture and laboratory.

CSCI–A 538 Network Technologies and Administration (3 cr.) P: A110, EDUC W200, or equivalent computer literacy. Introduction to network principles and current network technology, both hardware and software. Network administration tools and techniques. Laboratory provides practical experience. Credit not given for both A538 and A338.

CSCI–A 546 User-Interface Programming (3 cr.) P: Either A201, A202, A306, C212, A506, A597, A598, or equivalent experience. Learn to prototype and build graphical user interfaces for computer applications. Contemporary software design methodology. Students design and implement prototype interfaces to applications provided by the instructor. Extensive use will be made of both commercial and experimental software tools. Lab fee. Credit not given for both A546 and A346. Program is not currently offering this course.

CSCI–A 548 Mastering the World Wide Web (3 cr.) P: Two semesters of programming experience or equivalent, and some knowledge of operating systems. Project-oriented course leading to ability to maintain a Web site with full functionality. Topics include background on Internet network protocols and programming, Web server administration, advanced Web design and authoring, Web protocols, interfacing services into the Web. Lab fee. Credit not given for both A548 and A348.

CSCI–A 590 Topics in Programming (1–2 cr.) Eight-week courses designed to provide foundations for using modern programming tools for applications and web development. Lecture and lab.

CSCI–A 591 Introduction to Computer Science (3 cr.) A first course in computer science for those intending to take advanced computer science courses. Introduction to programming and to algorithm design and analysis. Using the Scheme programming language, the course covers several programming paradigms. Lecture and laboratory. Credit not given for both A591 and C211.

CSCI–A 592 Introduction to Software Systems (3 cr.) P: Programming experience. Design of computer software systems and introduction to programming. Topics include the C++ programming language and its data structure facilities; building and maintaining large projects; shell tools, and system calls. Introduction to object-oriented programming. Lecture and laboratory. Credit not given for both A592 and C212.

CSCI–A 593 Computer Structures (3 cr.) P: A592. Structure and internal operation of computers. The architecture and assembly language programming of a specific computer are stressed, in addition to general principles of hardware organization and low-level software systems. Lecture and laboratory. Lab fee. Credit not given for both A593 and C335. May be applied toward the Ph.D. minor.

CSCI–A 594 Data Structures (3 cr.) P: A592. P or C: C241 and A593. Systematic study of data structures encountered in computing problems; structure and use of storage media; methods of representing structured data; and techniques for operating on data structures. Lecture and laboratory. Credit not given for both A594 and C343. May be applied toward the Ph.D. minor.

CSCI–A 595 Fundamentals of Computing Theory (3 cr.) P: C241. P or C: C212. Fundamentals of formal language theory, computation models and computability, the limits of computability and feasibility, and program verification. Credit not given for both A595 and B401. May be applied toward the Ph.D. minor, graduate credit available for CS M.S. candidates with special permission.

CSCI–A 596 Programming Languages (3 cr.) P: A594. Systematic approach to programming languages. Relationships among languages, properties and features of languages, and the computer environment necessary to use languages. Lecture and laboratory. Credit not given for both A596 and C311. May be applied toward the Ph.D. minor.

CSCI–A 597 Introduction to Programming I (3 cr.) Fundamental programming constructs, including loops, arrays, classes, and files. General problem-solving techniques. Emphasis on modular programming, user-interface design, and developing good programming style. Credit not given for both A597 and A201.

CSCI–A 598 Introduction to Programming II (1.5–3 cr.) P: A597, A201, A504, or A304. Advanced programming techniques: user-defined functions and types, recursion vs iteration, parameter-passing mechanisms. Classic abstract data types and algorithms. Programming style. Object-oriented programming. Web programming. May be taught full term or 8 week. Credit not given for both A598 and CSCI-A 202.

CSCI–B 403 Introduction to Algorithm Design and Analysis (3 cr.) Credit not given for both B403 and B503.

CSCI–P 423 Compilers (4 cr.) Credit not given for both P423 and P523.

CSCI–P 436 Introduction to Operating Systems (4 cr.) Credit not given for both P436 and P536.

CSCI–P 438 Fundamentals of Computer Networks (3 cr.) Credit not given for both P438 and P538. Not applicable toward a major in computer science.

CSCI–B 441 Digital Design (4 cr.) Credit not given for both B441 and B541. Not applicable toward a major in computer science.

CSCI–P 442 Digital Systems (4 cr.) Credit not given for both P442 and P542. Not applicable toward a major in computer science. Program is not currently offering this course.

CSCI–B 443 Introduction to Computer Architecture (3 cr.) Credit not given for both B443 and B543.

CSCI–B 501 Theory of Computing (3 cr.) P: C241. Deterministic and nondeterministic automata, regular expressions, pumping lemmas; context-free languages, parsing, pushdown automata, context-sensitive languages, LBA, LR(k) languages, closure and decidability of language classes. Turing machines, random access machines, grammars, general recursive functions, equivalence of computation models, universal machines, relative computing. Unsolvability, semi-recursive sets, Rice's Theorem. Space and time complexity, NP completeness.

CSCI–B 502 Computational Complexity (3 cr.) Study of computational complexity classes, their intrinsic properties, and relations between them. Topics include time and space computational complexity, reducibility and completeness of problems within complexity classes, complexity of optimization problems, complexity hierarchies, relativization of the P=?NP conjecture, and parallel computation models and the class NC.

CSCI–B 503 Algorithms Design and Analysis (3 cr.) P: MATH M216, and C343. Models, algorithms, recurrences, summations, growth rates. Probabilistic tools, upper and lower bounds; worst-case and average-case analysis, amortized analysis, dynamization. Comparison-based algorithms: search, selection, sorting, hashing. Information extraction algorithms (graphs, databases). Graphs algorithms: spanning trees, shortest paths, connectivity, depth—first search, breadth—first search.

CSCI–B 510 Introduction to Applied Logic (3 cr.) Structures: relations between structures, term structures. Description: notation and meaning, substitution operations, first order formulas, database languages, program verification conditions, semantic valuation, normal forms, quantifier reduction, axiomatic theories. Proof: resolution, sequential calculi, natural deduction, automated theorem proving, semantic completeness. Limits of formalization: compactness, undecidability of truth, undecidability of canonical theories, nonformalizability of database theory.

CSCI–P 515 Specification and Verification (3 cr.) P: C311. Tools and techniques for rigorous reasoning about software and digital hardware. Safety, reliability, security, and other design-critical applications. Decision algorithms. Projects involving the use of automated reasoning, such as model checkers, theorem provers, and program transformation. Credit not given for both P415 and P515.

CSCI–B 521 Programming Language Principles (3 cr.) Systematic approach to programming languages. Relationships among languages, properties and features of languages, the computer environment necessary to support language execution.

CSCI–B 522 Programming Language Foundations (3 cr.) P: C311 or B521, and B510. Introduction to denotational, operational, and axiomatic approaches to programming language semantics. Semantic analysis of major programming language features. Logics of programs.

CSCI–P 523 Programming Language Implementation (3 cr.) P: B521 or C311. Implementation of traditional and nontraditional computer programming languages. Compilation, including lexical analysis, parsing, optimization, code generation, and testing. Run-time support, including run-time libraries, storage management, input-output. Comparison of implementation techniques. Extensive laboratory exercises.

CSCI–B 524 Parallelism in Programming Languages and Systems (3 cr.) P: P436 or P536, and either C311, H311 or B521, C343 or H343. Fundamentals of parallel computation, with an emphasis on parallel programming methodology and programming languages. Topics include: parallel algorithms; major paradigms for parallel software construction; (data parallelism, task/thread parallelism and CSP); compiling programs for parallel computers.

CSCI–B 534 Distributed Systems (3 cr.) A balanced treatment of fundamentals and practice of distributed systems. The foundational models, algorithms, and principles upon which distributed systems are based are studied in detail. These fundamentals are placed in the context of practical implementations by means of reading and critical analysis of research papers.

CSCI–P 535 Pervasive Computing (3 cr.) P: Object oriented programming. Topics in pervasive computing, such as sensors, mobility, tangibles, ambient displays, middleware, location and context-awareness; user-centered design methods, such as requirements gathering, design, prototyping, and evaluation. Labs cover current technologies, such as sensors and mobile devices. Lecture and laboratory. Lab fee.

CSCI–P 536 Advanced Operating Systems (3 cr.) P: C335 and C343, or honors versions. Advanced topics in operating systems, such as: multitasking, synchronization mechanisms, distributed system architecture, client-server models, distributed mutual exclusion and concurrency control, agreement protocols, load balancing, failure recovery, fault tolerance, cryptography, multiprocessor operating systems.

CSCI–P 538 Computer Networks (3 cr.) P: Operating systems or networking course. Layered TCP/IP architecture. LAN technologies (Ethernet, wireless, token rings). Switching. Internet addressing (IPv4, IPv6). Routing protocols. Congestion control (TCP, UDP). Applications (DNS, HTTP, peer-to-peer networks). Selection of topics including DHCP, ICMP, VPNs, multicast, security. Credit given for only one of P438 and P538.

CSCI–B 541 Hardware System Design I (3 cr.) P: C335 or honors version. Structured approach to hardware design,, emphasizing hardwired and microprogrammed control. Boolean algebra, hardware building blocks, architecture and control, implementation issues. In the laboratory, students build a working computer using hardware prototyping technologies. Basic training in the use of design and simulation software. Lecture and laboratory.

CSCI–P 542 Hardware System Design II (3 cr.) P: B541 or B441. Depending on instructor, a selection of topics in system-level design, such as simulation, logic synthesis, high-level synthesis, codesign, embedded software, verification, test, requirements specification, and others. Projects in system-level design. Computer-aided design tools. Lecture and laboratory. Program is not currently offering this course.

CSCI–B 543 Computer Architecture (3 cr.) P: C335 and C343 or honors versions. Fundamentals of computer design, instruction processing and performance analysis. Architecture of single-processor systems, focusing on pipelining, memory and memory hierarchies, and interconnect technology. Exploration of architecture classes such as high-performance multiprocessors, massively parallel computers, embedded systems.

CSCI–P 545 Embedded and Real-Time Systems (3 cr.) P: Any 400-level “systems” course (middle digit 3 or 4). Design and implementation of purpose-specific, locally

distributed software systems. Models and methods for time-critical applications. Real-time operating systems. Testing, validation, and verification. Safety-critical design. Related topics, such as resiliency, synchronization, sensor fusion, etc. Lecture and laboratory.

CSCI–B 551 Elements of Artificial Intelligence (3 cr.) P: C343 or H343, good knowledge of LISP or Scheme. Introduction to major issues and approaches in artificial intelligence. Principles of reactive, goal-based, and utility-based agents. Problem-solving and search. Knowledge representation and design of representational vocabularies. Inference and theorem proving, reasoning under uncertainty, planning. Overview of machine learning.

CSCI–B 552 Knowledge Based Artificial Intelligence (3 cr.) P: B551. Knowledge-based methods for artificial intelligence systems: knowledge representation, organization, and application. Typical content includes principles of memory organization, indexing and retrieval. Memory-based, analogical, and case-based reasoning. Applications to understanding, explanation, planning, and advisory systems.

CSCI–B 553 Neural and Genetic Approaches to Artificial Intelligence (3 cr.) P: CSCI-B 551. Approaches to the design of intelligent systems inspired by nervous systems, evolution, and animal behavior. Distributed and perceptually-grounded representations. Temporal processing. Perception and action. Genetic search. Unsupervised and reinforcement learning. Comparison of symbolic, subsymbolic, and hybrid approaches to intelligence.

CSCI–B 561 Advanced Database Concepts (3 cr.) P: C241, C335, and C343 or honors versions. Database models and systems, especially relational and object-oriented; relational database design theory; structures for efficient data access; query languages and processing; database applications development; views. Transaction management: concurrency and recovery.

CSCI–P 565-566 Software Engineering I-II (3–3 cr.) P: C343, B461 previously or B561 concurrently. Analysis, design, and implementation of software systems. Requirements specification: data and process modeling. Software design methodologies. Software quality assurance: testing and verification. Software development processes. Program is not currently offering this course.

CSCI–P 573 Scientific Computing (3 cr.) P: MATH M303 or M301, M343, and C212 or H212. For students from all scientific, engineering, and mathematical disciplines, this course provides an overview of computer hardware, software, and numerical methods that are useful on scientific workstations and supercomputers. Topics include high-performance computer architectures, software tools and packages, characteristics of numerical methods in common use, graphical presentation of results, and performance analysis and improvement.

CSCI–B 581 Advanced Computer Graphics (3 cr.) P: C343, MATH M301 or M303, or equivalent experience. Introduction to graphics hardware and software. Two-dimensional graphics methods, transformations, and interactive methods. Three-dimensional graphics, transformations, viewing geometry, object modeling and interactive manipulation methods. Basic lighting and shading. Video and animation methods.

CSCI–B 582 Image Synthesis (3 cr.) P: B581, MATH M215. Raster image display: color theory, gamma correction, and filtering. Advanced shading methods: local illumination models, global illumination models. Surface display, including ray tracing and Z-buffering. Solid modeling: spline surfaces, CSG, superquadrics, and deformations. Scientific visualization: isosurfaces and volume rendering. Program is not currently offering this course.

CSCI–B 599 Teaching in Computer Science (1 cr.) General principles of teaching and practical experiences that relate to teaching computer science. An important feature of the course is the microteaching, in which each participant prepares and delivers short lectures to the seminar participants. Each presentation is followed by critical analysis and discussion. Program is not currently offering this course.

CSCI–B 603 Advanced Algorithms Analysis (3 cr.) P: B503. Advanced topics in analysis of algorithms, including fast algorithms for classical problems, lower bounds results, and statistical behavior.

CSCI–B 607 Philosophy of Computation (3 cr.) P: Consent of the instructor. Critical examination of the conceptual foundations of computing. Several different views assessed with respect to conceptual, explanatory, and empirical criteria. Primary focus on formal symbol manipulation, recursive function theory, effective computability, computational complexity, digitality, and information processing. Some nonstandard approaches also considered: connectionism, dynamics, and artificial life. Program is not currently offering this course.

CSCI–B 609 Topics in Algorithms and Computing Theory (1–6 cr.) P: Instructor's permission. Special topics in algorithms and computing theory.

CSCI–B 619 Topics in Applied Logic (1–6 cr.) P: Instructor's permission. Special topics in applied logic.

CSCI–B 621 Advanced Concepts in Programming Languages (3 cr.) P: Either C311, H311, or B521. P or C: P423 or P523. Discussion of current issues in the design of programming languages. Modularity, abstraction, and static analysis. Applicative and nonapplicative models. Single and multiple processing.

CSCI–B 622 Programming Language Type Systems (3 cr.) P: C311 or B521. Theoretical foundations and engineering techniques for modern type systems, focusing on polymorphism and subtyping in typed lambda-calculi; applications, including type systems for objects, abstract data types, and modules; issues in type checker implementation and polymorphic type inference. Program is not currently offering this course.

CSCI–B 629 Topics in Programming Languages (1–6 cr.) P: C311 or B521 and instructor's permission. Special topics in programming languages.

CSCI–B 639 Topics in Software Systems (1–6 cr.) P: Instructor's permission. Special topics in software systems.

CSCI–B 644 Very Large Scale Integration (3 cr.) P: B441 or B541. Basic theory and practice required

to convert hardware algorithms and architecture to silicon structures. Use of state-of-the-art design tools for integrated circuits. Lab fee.

CSCI–B 649 Topics in Systems (1–6 cr.) P: Instructor's permission. Special topics in systems.

CSCI–B 651 Natural Language Processing (3 cr.) P: B551. R: B552 or B553. Theory and methods for natural language processing. Algorithms for sentence parsing and generation. Context-free and unification grammars. Question-and-answer systems. Analysis of narratives. Finite-state approaches to computational phonology and morphology. Machine translation. Machine learning of natural language. Speech recognition. Neural-network and statistical alternatives to symbolic approaches.

CSCI–B 652 Computer Models of Symbolic Learning (3 cr.) P: B552. Symbolic artificial intelligence methods for learning. Inductive and explanation-based generalization. Failure-driven learning. Case-based learning. Typical content includes operationality of explanations and utility of learning. Goal-driven learning. Criteria for when, what, and how to learn. Learning in integrated architectures.

CSCI–B 656 Web Mining (3 cr.) Machine learning techniques to mine the Web and other unstructured/ semistructured, hypertextual, distributed information repositories. Crawling, indexing, ranking and filtering algorithms using text and link analysis. Applications to search, classification, tracking, monitoring, and Web intelligence. Group project on one of the topics covered in class.

CSCI–B 657 Computer Vision (3 cr.) P: C463 or B551. Concepts and methods of machine vision as a branch of artificial intelligence. Basics of digital image processing. Local and global tools for deriving information from image data. Model-based object recognition and scene understanding.

CSCI–B 659 Topics in Artificial Intelligence (1–6 cr.) P: Instructor's permission. Special topics in artificial intelligence.

CSCI–B 661 Database Theory and Systems Design (3 cr.) P: B461 or B561. Database models: relational, deductive, complex-object, object-oriented. Query languages: relational algebra and calculus, datalog, fixpoint logics, object-oriented query languages. Transaction management theory: concurrency control, recovery, distribution. Post-relational and object-oriented database systems.

CSCI–B 665 Software Engineering Management I (3 cr.) P: B561 or BUS S560. Topics include the high cost of software, the software life cycle, understanding programming teams, and methodologies for controlling development. Presentation of readings and supervision of programming teams producing software products required. Program is not currently offering this course.

CSCI–B 666 Software Management Implementation II (1–3 cr.) P: B665. Continuation of projects from B665. Periodic reports and a final paper required. If taken for two or more credits, an additional project or paper is required. Program is not currently offering this course.

CSCI–B 669 Topics in Database and Information Systems (1–6 cr.) P: Instructor's permission. Special topics in database and information systems.

CSCI–B 673 Advanced Scientific Computing (3 cr.) P: P573 and MATH M471. Multiprocessor organization: vectorization, memory organization, processor topologies and architectures. Models of parallelism. Programming language and systems for scientific and high-performance computing. Environments for interactive scientific experiments and databases. Distributed programming tools. Parallelism in scientific problems: parallel algorithmic techniques, parallel algorithms and models, parallel performance analysis and debugging.

CSCI–B 679 Topics in Scientific Computing (1–6 cr.) P: Instructor's permission. Special topics in scientific computing.

CSCI–B 689 Topics in Graphics and Human Computer Interaction (1–6 cr.) P: Instructor's permission. Special topics in graphics and human computer interaction.

CSCI–Y 790 Graduate Independent Study (1–6 cr.) Independent study under the direction of a faculty member, culminating in a written report. R grade not allowed. The different options for independent study are: Research and Reading, Software System Development, Master's Research Project, Master's Software Project, and a University Master's Thesis.

CSCI–Y 798 Professional Practicum/Internship (non-credit) (0 cr.) P: Current enrollment in graduate degree program in computer science. Provides for participation in graduate-level professional training and internship experience.

CSCI–Y 890 Thesis Readings and Research (1–12 cr.) Research under the direction of a member of the graduate faculty leading to a Ph.D. dissertation.

Criminal Justice

College of Arts and Sciences

Departmental E-mail: crimjust@indiana.edu

Departmental URL: www.indiana.edu/~crimjust

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Program Information

The department offers the opportunity for multidisciplinary graduate degrees in criminal justice that are designed for students coming from a variety of academic backgrounds. Courses and programs in the department prepare students for academic teaching and research positions or for administrative, research, and management careers in the criminal justice system or the private sector. The faculty represents a diversity of approaches to criminal justice studies: anthropology, criminal justice, geography, history, law, political science, psychology, and sociology. Students may also study with faculty from other departments and schools who make up the university-wide criminal justice consortium.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission Requirements

Applicants must submit the following: (1) all official post-secondary transcripts; (2) a 300- to 500-word statement of academic and professional goals; (3) scores from the verbal, quantitative, and writing sections of the GRE; (4) evidence of potential for success in graduate work, as attested by letters of recommendation from those familiar with the applicant's academic performance (two of the applicant's three letters must be from faculty members); (5) international TOEFL is required of all foreign students.

Course Requirements

A total of 36 credit hours, 27 of which must be taken in the Department of Criminal Justice and either an M.A. thesis or two substantial papers. Required are P594 (Research Methods) and S501 (Statistics).

Thesis

Optional. Students may earn up to 6 credit hours for an M.A. thesis.

Doctor of Philosophy Degree

Admission Requirements

Applicants must submit the following: (1) all official post-secondary transcripts; (2) a 300- to 500-word statement of academic and professional goals; (3) scores from the verbal, quantitative, and writing sections of the GRE; (4) evidence of potential for success in graduate work, as attested by letters of recommendation from those familiar with the applicant's academic performance (two of the applicant's three letters must be from faculty members); (5) international TOEFL is required of all foreign students.

Course Requirements

The Doctor of Philosophy degree will require a total of 90 credit hours beyond the bachelor's degree, of which 12 hours are required courses. Students are required to complete 3 hours in research methods (P594), 6 hours in statistics (currently taught in the Statistics Department: S501 and S503), and a 3-hour research tool requirement that may be satisfied with an advanced (qualitative or quantitative) methods course or advanced statistics course approved by the Director of Graduate Affairs, or by demonstrating reading proficiency in one of the languages from those approved by the Department of Criminal Justice or a language demonstrably useful in the student's research program. A student must have at least one minor area from outside the Department of Criminal Justice. A dissertation for up to 30 credit hours is required.

Foreign Language/Research Tool Requirement

One of the following: (1) reading proficiency in one of the languages from those approved by the Department of Criminal Justice or a language demonstrably useful in the student's research program; or (2) the 3-hour research tool requirement that may be satisfied with an advanced (qualitative or quantitative) methods course or advanced statistics course approved by the Director of Graduate Affairs.

Qualifying Examination

All doctoral students are expected to demonstrate basic proficiency by passing a qualifying examination following completion of required courses. This examination takes the form of a thesis consisting of an original research project. It is expected that the written component of the qualifying thesis will be of publishable quality. An oral defense is required. The written thesis and the oral defense are evaluated as a combined effort.

Dissertation Proposal

Dissertation proposals must be submitted only after successfully completing the required qualifying Ph.D. examination. An oral defense of the dissertation proposal is required.

Final Examination

Oral defense of the dissertation is required.

Ph.D. Minor in Criminal Justice

Students from other departments or schools who want to minor in criminal justice should consult with the Director of Graduate Affairs on the selection of faculty advisors. At least 12 credit hours in criminal justice courses are required. All 12 hours are elective credit in the Department. A Declaration of Minor form must be submitted to the Director of Graduate Affairs.

Faculty

Chairperson

Roger J. R. Levesque*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Ellen Dwyer* (History), Roger J. R. Levesque*, Harold E. Pepinsky* (Emeritus), Leon E. Pettiway*, William Alex Pridemore*, Bruce D. Sales*, Kip Schlegel*

Associate Professors

Stephanie C. Kane*, Mary Lee Luskin*, William Oliver*, Philip C. Parnell*, Steve Russell* (Emeritus), Marla Rita Sandys*, Arvind Verma*

Assistant Professors

Nathalie Fontaine, Richard Spano

Graduate Advisor

Professor William Alex Pridemore*, Sycamore Hall 302, (812) 856-4675

Please check with the Director of Graduate Affairs for the current list of faculty endorsed to direct dissertations.

Courses

CJUS–P 501 Proseminar: Criminal Justice I (3 cr.) A proseminar to provide an intensive introduction to the basic areas of criminal justice.

CJUS–P 502 Proseminar: Criminal Justice II (3 cr.) Theories of crime and delinquency.

CJUS–P 512 Corrections (3 cr.) Reviews historical and philosophical bases of correctional system and examines components of system (community corrections, jails, and prisons). Focuses on the structure and functions of the corrections system with particular attention to the role of broader social forces on the development and operation of the system.

CJUS–P 515 Police in Society (3 cr.) Covers the bases and impacts of recent changes in U.S. policing, particularly with respect to community-oriented policing. Changes are analyzed in terms of the organizational and political contexts in which they occur as well as from historical and cross-cultural perspectives.

CJUS–P 517 Juvenile Justice (3 cr.) Examines the historical development of the juvenile justice system, the tradition of reform, underlying ideologies, and current debates.

CJUS–P 519 Probation and Parole (3 cr.) Primary emphasis on the development and evaluation of probation, parole, and other systems of community corrections. Examines the theoretical underpinnings of community programs for offenders, and analysis of recent research will be undertaken. The policy implications for this area will also be studied.

CJUS–P 520 Public Control of Deviant Behavior (3 cr.) Critical review of theoretical and empirical literature on selected topics in deviant behavior, including prostitution, child abuse, psychopathy, homosexuality, drug abuse, alcohol abuse, and alcoholism.

CJUS–P 594 Introduction to Research Methods (3 cr.) Research methodology in criminal justice. Research design, scientific methods, quantitative/qualitative applications, ethical questions, and the role of the criminal justice researcher.

CJUS–P 595 Data Analysis in Criminal Justice I (3 cr.) Data analysis applied to criminal justice data, including measurement, tables, graphs, probability, nonparametric statics, matrix algebra, correlation and regression, and tests of significance.

CJUS–P 596 Data Analysis in Criminal Justice II (3 cr.) P: CJUS P595. Focus on the general linear model and multivariate statistical techniques such as logit, probit, and structural equation modeling.

CJUS–P 599 Research Practicum (1–6 cr.) Required course for Ph.D. students. Designed to provide guided experience in conducting research independently. The topic and scope of the student's effort must be approved in advance by the professor.

CJUS–P 600 Theories of Crime Causation (3 cr.) Examination of theories of crime and criminal behavior from three major perspectives: biology, psychology, and sociology. The goal of the seminar is twofold: (1) to understand the strengths and weaknesses of existing theories from these diverse perspectives, and (2) to suggest that theoretical explanations of crime must of necessity be multidimensional to encompass the complexity of the problem.

CJUS–P 602 Courts and Criminal Justice (3 cr.) Addresses the nature and operation of courts with respect to criminal cases: structure and administration of courts; recruitment and selection of major participants; and specific decisions in the processing of criminal cases, including the decision to charge, pretrial release, trials and plea bargains, and criminal appeals.

CJUS–P 610 Law and Society (3 cr.) Study of the interaction between social forces and legal processes, focusing on the question of what shapes the law. Subareas to be examined include the courts, sentencing, police, crime, deviance, and community-based justice. Emphasis on the links between crime-related behavior as defined by the law, its social and cultural environments, and the individual.

CJUS–P 619 Crime and Public Policy (3 cr.) Examines processes by which societies define crime and develop responses to crime. Particular attention is given to case studies of how particular policies were developed and implemented, and what effects these policies produced.

CJUS–P 622 Criminal Careers (3 cr.) A small number of career criminals commit the majority of serious crimes. Seminar explores the major personal and typological dimensions of such criminals by exposing the student to the commonalities among diverse forms of criminal activity and the implications for crime theory development and crime control policies.

CJUS–P 623 Violent Behavior (3 cr.) Critical analysis of current theory and research on violent behavior utilizing a multidisciplinary framework. Topics include concepts and methods in the study of violence; prediction of violence; family and sexual violence; institutional violence; drugs and violence; and prevention of violent behavior.

CJUS–P 625 Correlates of Crime (3 cr.) Examines the incidence and correlates (individual, community, and cultural) of crime and the varying methods of measuring crime. Implications for criminological theory and research are addressed.

CJUS–P 627 White-Collar Crime (3 cr.) Examines the data and research related to white-collar crime in an effort to understand issues of causation and social control of this particular form of crime. Places white-collar crime within the context of general theories of crime, and compares and contrasts the various legal mechanisms (civil, administrative, and criminal) available to control it.

CJUS–P 629 Victimization (3 cr.) Covers current theory, research, and measurement issues pertaining to the nature, extent, causes, and effects of criminal victimization; evaluations of programs for crime victims; and political and ideological differences among varying views of victim rights.

CJUS–P 633 Dispute Settlement (3 cr.) Examines relationships between social and cultural contexts in the fields of crime and law. Focuses on factors that influence the development and use of dispute settlement processes, such as mediation and negotiation; and the evolution, development, and disintegration of legal and criminal justice systems.

CJUS–P 634 Sentencing Theory and Practice (3 cr.) Examines the theoretical and practical issues relating to the sentencing of criminals. In particular, focuses on the aims of punishment and the construction of sentencing models and alternatives designed to achieve these aims.

CJUS–P 637 Community, Crime, and Criminal Justice (3 cr.) Examines the role of community structure and function in the distribution of crime and the formal and informal response to crime.

CJUS–P 639 History of Criminal Justice in the U.S. (3 cr.) Examination of the development of the American criminal justice system, with particular attention to courts, prisons, and the police. Examines how definitions of deviance and criminality have changed over time and the ways class, gender, and race have shaped law and justice.

CJUS–P 670 Cross-Cultural Studies (3 cr.) Examines significance of cross-cultural research to criminology/ criminal justice, research practices and problems, with emphasis on analysis of field experiences and findings.

CJUS–P 671 Comparative Justice Systems (3 cr.) Engages students in comparative issues and research to reveal political, historical, and cultural factors that have influenced criminal justice and law in the United States. Develops student abilities to conceptualize crime and law without using official legal concepts, but for purposes of comparative social scientific research.

CJUS–P 672 Ideas About Justice (3 cr.) Explores a school or related schools of thought and practice about what "justice" means and requires. Special topics for the course may vary; focusing, for instance, on feminist justice, "just desserts" theory, restorative justice, retributive justice, or utilitarian justice.

CJUS–P 674 Law, Crime, and Justice in Post-Soviet Russia (3 cr.) This interdisciplinary course begins by examining how the executive, legislative, and judicial branches of government are being influenced by the forces of transition. We then look at Russian crime, including corruption, patterns of interpersonal violence, human trafficking, and drug use. The last section focuses on the Russian criminal justice system, including juvenile justice, policing, and prisons.

CJUS–P 675 Women and Crime (3 cr.) Provides a flexible forum for the discussion of a previously neglected topic in criminology/criminal justice: women and crime. Includes discussion and debate on the nature and extent of women's criminality, processing of women through each step of the criminal justice system, and women working in criminal justice.

CJUS–P 680 Seminar: Issues in Criminal Justice (3 cr.) Selected topics in criminal justice that will vary from semester to semester.

CJUS–P 682 Seminar on Law Enforcement and Minorities (3 cr.) Selected topics dealing with problems involving minorities and criminal justice system operations.

CJUS–P 694 Research in Criminal Justice (arr. cr.) P: P594. This course is eligible for a deferred grade.

CJUS–P 751 Topical Research Seminar (3–12 cr.) Students are expected to demonstrate their skills in research design and data analysis on a topic agreed-upon with the instructor. The instructor may encourage team research for appropriate designs and topics. Students are encouraged to develop topics related to dissertation research.

CJUS–P 794 M.A. Thesis (6 cr.) P: P594. This course is eligible for a deferred grade.

CJUS–P 851 Reading in Criminal Justice (1–6 cr.) This course is eligible for a deferred grade. Individualized readings on topics not covered in regular course offerings.

CJUS–P 855 Research in Criminal Justice (1–6 cr.) P: Graduate standing in criminal justice or consent of instructor. This course is eligible for a deferred grade. The student is expected to make substantial progress toward identification of an eventual dissertation project.

CJUS–P 859 Ph.D. Thesis (arr.–30 cr.) This course is eligible for a deferred grade.

CJUS–G 901 Advanced Research (6 cr.) This course is eligible for a deferred grade. Students who have completed 90 credit hours and all requirements for the Ph.D. are eligible to enroll in G901 for a flat fee.

Cultural Studies

College of Arts and Sciences

Departmental E-mail: cstudies@indiana.edu

Departmental URL: www.indiana.edu/~cstudies/main

Curriculum

Ph.D. Minor in Cultural Studies

Cultural Studies is a multidisciplinary program primarily applicable to the humanities and social sciences. Drawing upon recent developments in cultural, social, and literary theory, this program emphasizes the investigation of cultural production and the social construction of values, ideas, and belief systems. Focusing on both contemporary and historical phenomena, courses in this area pay particular attention to the relationship between cultural forms and power relations in society. Issues of class, race, and gender receive prominent critical attention, as do conventional divisions between "high culture" and more "popular" forms of expression. Students in this program are encouraged to fashion a course of study that meets their particular interests and needs. Cultural Studies is especially useful for those seeking to complement studies in an area of disciplinary specialization with a more interdisciplinary minor.

Course Requirements

Four courses for a minimum of 13 hours of credit in courses approved for the Cultural Studies Program, including C601 and either C701 or C790. The remaining hours are mostly satisfied by taking classes that are cross-listed with the home department of the designated instructor. Students must officially declare the minor during the early phase of their Ph.D. studies by consulting with the director of the Cultural Studies Program.

Examinations

Satisfactory performance on the qualifying examinations in the student's major department required.

Faculty

Director

Purnima Bose*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Richard Bauman* (Emeritus, Folklore, Communication and Culture), Patrick Brantlinger* (Emeritus, English), David P. Thelen* (Emeritus, History)

Chancellor's Professor

John Bodnar* (History), James Naremore* (Emeritus, English, Communication and Culture)

Professors

Joëlle Bahloul* (Anthropology, Jewish Studies), Linda Charnes* (English), Donna Eder* (Sociology), Jonathan Elmer* (English), Thomas F. Gieryn* (Sociology), Paula Girshick* (Anthropology), Jeffrey Gould* (History), Matthew Guterl* (American Studies, African American and African Diaspora Studies), Robert Ivie* (Communication and Culture), Marianne Kielian* (Music), Barbara G. Klinger* (Communication and Culture), John Lucaites* (Communication and Culture), Andrew Miller* (English), Richard Nash* (English), David Pace* (History), William Rasch* (Germanic Studies), Michael Robinson* (East Asian Languages and Cultures), Darlene Sadlier* (Spanish and Portuguese), Beverly Stoeltje* (Anthropology), Dror Wahrman* (History), Suzanna Walters* (Gender Studies), Stephen Watt* (English), Marc A. Weiner* (Germanic Studies), Richard Wilk* (Anthropology, Gender Studies), David R. Zaret* (Sociology)

Associate Professors

Christopher Anderson* (Communication and Culture), Purnima Bose* (English), Claudia Breger* (Germanic Studies), Maria Bucur-Deckard* (History), Nicholas Cullather* (History), Michael Dodson* (History), Patrick Dove* (Spanish and Portuguese), Mary Favret* (English), Lessie Jo Frazier* (Gender Studies), Sara L. Friedman* (Anthropology, Gender Studies, East Asian Languages and Cultures), Jane E. Goodman* (Communication and Culture), Margaret Gray* (French and Italian), Vivian Halloran* (Comparative Literature), Joan Hawkins* (Communication and Culture), Scott Herring* (English), Jason Jackson* (Folklore & Ethnomusicology), Stephanie Kane* (Criminal Justice), DeWitt D. Kilgore* (English), Alejandro Mejias-Lopez* (Spanish and Portuguese), Marissa Moorman* (History), Scott O'Bryan (History, East Asian Languages and Cultures), Angela Pao* (Comparative Literature), Radhika Parameswaran* (Journalism), Philip Parnell* (Criminal Justice), Phaedra C. Pezzullo* (Communication and Culture), Ranu Samantrai* (English), Eric Sandweiss* (History), Jonathan Simons* (Communication & Culture), Rakesh H. Solomon* (Theatre & Drama), Ted Striphas* (Communication & Culture), Shane Vogel* (English, American Studies), Brenda Weber* (Gender Studies)

Assistant Professors

Akin Adesokan (Comparative Literature), Karen Bowdre (Communication and Culture), Stephanie DeBoer (Communication and Culture), Michael Foster (Folklore and Ethnomusicology), Michael Kaplan (Communication & Culture), David A. McDonald (Folklore and Ethnomusicology), Micol Seigel* (American and African Diaspora Studies), Michiko Suzuki (East Asian Languages & Cultures)

Courses

CULS–C 601 Introduction to Cultural Studies (4 cr.) Survey of main issues, theories, and methods in cultural studies. Topics may include communications and mass culture; gender, race, and the social construction of identity; historiographic and ethnographic approaches to modern cultures and societies.

CULS–C 701 Special Topics in Cultural Studies (3–4 cr.) P: C601 or consent of instructor. Advanced exploration of a specific issue in cultural studies (for example, "avant-garde" movements in politics and the arts in relation to social and cultural modernity).

CULS–C 790 Independent Readings in Cultural Studies (1–6 cr.) P: Consent of the instructor. Open only to students completing minors in cultural studies.

East Asian Languages and Cultures

College of Arts and Sciences

Departmental E-mail: ealc@indiana.edu

Departmental URL: www.indiana.edu/~ealc

Curriculum

Degrees Offered

Master of Arts in Chinese or Japanese, Master of Arts in East Asian Studies, Dual Degree: Master of Arts in East Asian Studies and Master of Business Administration, Joint Master of Arts Program in East Asian Studies and Master of Public Affairs, Doctor of Philosophy in Chinese or Japanese

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Graduate Record Examination General Test is required. International students admitted into departmental programs must demonstrate a high level of proficiency in English or take additional courses to remove deficiencies.

Grade

Students must maintain at least a 3.0 (B) grade point average.

Master of Arts Degree in Chinese or Japanese

Admission Requirement

An undergraduate major in Chinese, Japanese, or East Asian studies or a strong major in any field in the humanities or in the social sciences with general knowledge of the culture of China or Japan. Proficiency in Chinese or Japanese through at least second year is expected.

Course Requirements

A total of 30 credit hours, including M.A. project hours, in approved courses. Ordinarily, at least 20 of these credit hours, not counting thesis hours, must be from among the

courses listed under “Chinese” or “Japanese” (depending on the student’s major) on the list that follows, including at least three at the 500 level or above, of which one must be C511 or J511. Please note that third-year language courses do not count toward the required 500-level courses. The remaining credit hours may be taken from other departments at the discretion of the Director of Graduate Studies. Except for overseas study credits, normally a maximum of 3 credit hours of E595 may be counted toward the degree.

Language Requirements

Completion of the fourth-year level or equivalent in the student’s major language. For some areas of research, proficiency in a classical East Asian language, involving up to one year of coursework, may be necessary. Specific program requirements will be determined in consultation with the Director of Graduate Studies and the student’s Advisory Committee, according to departmental guidelines. Language courses at the third year level or above of the major language and at the third year level or above of other East Asian languages may be counted toward the degree. Language courses at the first and second year level will not count toward the degree. Students planning to apply to Ph.D. programs in fields that typically require a second East Asian language are strongly encouraged to begin such language study during M.A. coursework.

Project

The student may choose either a thesis or an essay.

Thesis

- Normally 50–80 pages
- Demonstrates the student’s skills in the use of primary sources and scholarly research.
- May be taken for up to 4 credit hours.
- The thesis option is strongly recommended to students who wish to be admitted to the Ph.D. program.

Essay

- Normally 40–50 pages
- Demonstrating the ability to master, use, and critically evaluate a body of scholarly literature in the student’s field.
- May be taken for up to 4 credit hours.

Master of Arts in Chinese or Japanese

Language Pedagogy Track

Admission Requirements

An undergraduate degree with at least two years of the student’s proposed language of specialization.

Course Requirements

A total of 30 credit hours, including M.A. project hours, in approved courses. At least 20 of these credit hours must be from among the courses listed under “Chinese” or “Japanese” (depending on the student’s major). Of these, students in Chinese language pedagogy must take C535, C525, and C527; students in Japanese language pedagogy must take J520, J525, and J527. Also required is one semester of Literary Chinese or Literary Japanese. The remaining credit hours may be taken from courses in education (e.g., L520 and L630), linguistics (e.g., L503), TESOL/Applied Linguistics (e.g., T532 and T550), and East Asian culture courses, in consultation with the advisor. Except for overseas study credits, normally a maximum of 3 credit hours of E595 may be counted toward the degree.

Language Requirements

Completion of the fourth-year level or equivalent in the student’s major language. Language courses at the first and second year level will not count toward the degree.

M.A. Project

An M.A. project demonstrating the student’s pedagogical skills is required. The project may take a variety of forms, ranging from an essay involving empirical study of methodological/language acquisition issues to development of concrete teaching tools with pedagogical analyses. Up to 4 credit hours may be counted toward the degree.

Master of Arts Degree in East Asian Studies

Admission Requirements

An undergraduate major in East Asian studies or a strong major in any field in the humanities or in the social sciences with general knowledge of the culture of East Asia. Entering students who have not had the first two years of an East Asian language must remove this deficiency within the first two years of graduate study.

Course Requirements

A total of 30 credit hours, including M.A. project hours, in approved courses. Ordinarily, at least 20 of these credit hours must be from among the courses listed under “Culture and Area Courses” on the list that follows. At least three courses must be at the 500 level or above. Please note that third and fourth-year language courses do not count toward the required 500-level courses. Except for overseas study credits, normally a maximum of 3 credit hours of E595 may be counted toward the degree.

Language Requirement

Satisfactory completion of three years of Chinese, Japanese, or Korean, or the equivalent, as determined by examination. Language courses at the third year level and above may be counted toward the degree. Language courses at the first and second year level will not count toward the degree. Students planning to apply to a Ph.D. program in fields that typically require a second East Asian language are strongly encouraged to begin language work during the M.A. program.

Project

The student may choose either a thesis or an essay.

Thesis

- Normally 50–80 pages
- Demonstrates the student’s skills in the use of primary sources and scholarly research.
- May be taken for up to 4 credit hours.
- The thesis option is strongly recommended to students who wish to be admitted to the Ph.D. program.

Essay

- Normally 40–50 pages
- Demonstrating the ability to master, use, and critically evaluate a body of scholarly literature in the student's field.
- May be taken for up to 4 credit hours.

Dual Degree: Master of Arts in East Asian Studies and Master of Business Administration

Admission Requirements

Students must separately apply to and be accepted into both the M.B.A. program in business and the M.A. degree program in East Asian studies. The normal criteria for admission to each program apply. Students may apply for admission to both programs simultaneously. Alternatively, students may begin their studies in either school and then apply to the second program after admission into the first program. Either way, students will likely spend one year in the College of Arts and Sciences, one year at the School of Business and the final year completing the final requirements (including the thesis) of both programs.

EALC Course Requirements

30 credit hours, including three social science courses, two history courses, and one humanities course. Ordinarily, at least 18 of these credit hours must be from among the courses listed under "Culture and Area Courses" on the list that follows. At least three courses must be at the 500 level or above. Please note that fourth-year language courses do not count toward the required 500-level courses. Except for overseas study credits, normally a maximum of 3 credit hours of E595 may be counted toward the degree. With the approval of the Director of Graduate Studies, up to 6 of the required 30 credits may be business classes.

Business Course Requirements

Required and elective courses to total 40.5 credit hours of graduate course work. The possibilities of course combinations are many and will depend on your specific career path. For details, contact the M.B.A program office, 812-855-8006.

Language Requirement

Satisfactory completion of three years of Chinese, Japanese, or Korean, or the equivalent, as determined by examination. Language courses at the third year level and above may be counted toward the degree. Language courses at the first and second year level will not count toward the degree.

Project

Jointly supervised by EALC and Business faculty, the student may choose either a thesis or an essay, combining expertise in East Asian studies and business.

Thesis

- Normally 50–80 pages
- Demonstrates the student's skills in the use of primary sources and scholarly research.
- May be taken for up to 4 credit hours.
- The thesis option is strongly recommended to students who wish to be admitted to the Ph.D. program.

Essay

- Normally 40–50 pages
- Demonstrating the ability to master, use, and critically evaluate a body of scholarly literature in the student's field.
- May be taken for up to 4 credit hours.

Up to 3 credit hours may be counted toward the degree.

Joint Master of Arts Program in East Asian Studies and Master of Public Affairs

Admission Requirements

Students must separately apply to and be accepted into both the M.P.A program in SPEA and the M.A. degree program in East Asian Studies. The normal criteria for admission to each program apply. Students may apply for admission to both programs simultaneously. Alternatively, students may begin their studies in either school and then apply to the second program after admission into the first program.

EALC Course Requirements

Twenty-four credit hours, including three social science courses, two history courses, and one humanities course. Ordinarily, at least 18 of these credit hours must be from among the courses listed under "Culture and Area Courses" on the list that follows. At least three courses must be at the 500 level or above. Please note that third and fourth-year language courses do not count toward the required 500-level courses. Except for overseas study credits, normally a maximum of 3 credit hours of E595 may be counted toward the degree.

SPEA Course Requirements

Thirty-six credit hours of graduate course work to be distributed as follows: (1) professional development practicum courses; (2) courses in the SPEA core; (3) specialized concentration course, which may include SPEA, EALC, and other courses, to be selected in consultation with a SPEA advisor. For details, contact the SPEA graduate student services office, SPEA 260, 812-855-9485.

Language Requirement

Satisfactory completion of three years of Chinese, Japanese, or Korean, or the equivalent, as determined by examination. Language courses at the third year level and above may be counted toward the degree. Language courses at the first and second year level will not count toward the degree.

Project

The student may choose either a thesis or an essay.

Thesis

- Normally 50–80 pages)
- Demonstrates the student's skills in the use of primary sources and scholarly research.

- The thesis option is strongly recommended to students who wish to be admitted to the Ph.D. program.

Essay

- Normally 40–50 pages
- Demonstrating the ability to master, use, and critically evaluate a body of scholarly literature in the student's field. Up to 3 credit hours may be counted toward the degree.

Doctor of Philosophy Degree in Chinese or Japanese

Admission Requirement

An M.A. in Chinese or Japanese or its equivalent.

Course Requirements

A minimum of 30 credit hours, beyond those taken for the M.A., in departmental courses, as follows: five courses (15 credit hours) at the 400 and 500 levels, of which a minimum of two courses must be at the 500 level; one course (3 credit hours) in research methods/bibliography (C511 or J511); and four seminar courses (16 credit hours), including the seminar in East Asian studies scholarship (EALC-E604). Please note that third and fourth-year language courses do not count toward the five required 400–500-level courses. A dissertation is required.

Minor

A minimum of 12 to 15 credit hours of course work in an outside field, such as comparative literature, fine arts, folklore, history, political science, religious studies, or other approved departments. Examination in the minor if prescribed by the department or program concerned.

Language Requirements

Before the qualifying examination, students must demonstrate proficiency, both oral and reading, in the student's major language, as well as reading proficiency in French, German, or another European language relevant to their research area. For some areas of research, proficiency in a second modern East Asian language or a classical East Asian language is necessary. Specific program requirements will be determined in consultation with the Director of Graduate Studies and the student's Advisory Committee, according to departmental guidelines. Language courses at the first and second year level will not count toward the degree.

Qualifying Examinations

Upon completion of course work, two written examinations in subject fields (one in the major field of specialization, one in a historical period of the major cultural area) and one oral exam.

Dissertation

On an approved subject in the major language or culture. Up to 15 credit hours may be taken for the dissertation. Following approval by the research committee, the dissertation proposal is presented orally to the department.

Final Examination

Upon completion of the dissertation, a final oral examination on the dissertation and major area.

Ph.D. Minor in Chinese or Japanese

Course Requirements

Doctoral students from other departments may complete a minor in Chinese or Japanese by completing the following:

1. Proficiency in Chinese or Japanese (completion of the third-year level).
2. 12 to 15 credit hours, or at least 4 courses, in courses with a majority of content taught in Chinese or Japanese. These courses will be listed under "Chinese" or "Japanese" in this bulletin.

Courses counted toward fulfillment of the language proficiency requirement may not also be counted toward the 12 to 15 hours of Chinese or Japanese content courses. A maximum of 3 credit hours of E595 may be counted toward the minor.

Ph.D. Minor in East Asian Studies

Course Requirements

Doctoral students from other departments may complete a minor in East Asian Studies by completing the following:

1. A minimum of four culture courses in the East Asian Languages and Cultures, two of which must be in fields outside the student's major discipline.
2. Proficiency in Chinese, Japanese, or Korean (completion of the third-year level).
3. Courses counted toward the fulfillment of the language proficiency requirement may not also be counted toward the culture class requirement. A maximum of 3 credit hours of E595 may be counted toward the minor.

Faculty

Chairperson

Professor Michael Robinson*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Y. J. Chih* (Emeritus), Jurgis Elisonas* (Emeritus), Eugene Eoyang* (Emeritus, Comparative Literature), Yoshio Iwamoto* (Emeritus, Comparative Literature), Sumie Jones* (Emerita, Comparative Literature), Gregory J. Kasza*, Paul Kuznets* (Emeritus, Economics), Jennifer Li-Chia Liu, Klaus Mühlhahn* (History), Susan Nelson* (Emerita, Fine Arts), Jean Robinson* (Political Science), Michael E. Robinson*, Richard Rubinger*, Lynn Struve* (Emerita, History), Natsuko Tsujimura*, George M. Wilson* (Emeritus, History), Margaret Yan* (Emerita)

Associate Professors

Laurel Cornell* (Sociology), Robert J. Eno*, Sara Friedman*, (Anthropology, Gender Studies), Scott Kennedy*, Hyo-Sang Lee, , Ethan Michelson (Sociology), Edith Sarra*, Aaron Stalnaker (Religious Studies), Yasuko Ito Watt (Emerita)

Assistant Professors

Heather Blair (Religious Studies) Gardner Bovingdon (Central Eurasian Studies, Stephanie DeBoer

(Communication and Culture), Michael Foster (Folklore and Ethnomusicology), Ho-Fung Hung (Sociology), Heon-Joo Jung, Keiko Kuriyama, Charles Lin, Manling Luo, Scott Patrick O'Bryan, Marvin Sterling (Anthropology), Kevin Tsai (Comparative Literature), Michiko Suzuki,

Senior Lecturer

Sue Tuohy (Folklore and Ethnomusicology)

Lecturer

Misako Matsubara

Adjunct Professor

Heidi Ross* (School of Education)

Adjunct Assistant Professor

Rick Harbaugh (School of Business)

Director of Graduate Studies

Professor Natsuko Tsujimura*, Goodbody Hall 250, (812) 855-1992

Courses

Chinese

Language and Linguistics Courses

EALC–C 101-102 Elementary Chinese I-II (2–2 cr.)

EALC–C 201-202 Second-Year Chinese I-II (2–2 cr.)

EALC–C 533-534 Third-Year Chinese I-II (3–3 cr.)

EALC–C 543-544 Fourth-Year Chinese I-II (3–3 cr.) P: A grade of C or higher in C534 or equivalent proficiency. Emphasis on advanced reading skills.

EALC–C 451-452 Advanced Classical Chinese I-II (3–3 cr.)

EALC–C 506-507 Literary Chinese I-II (3–3 cr.)

EALC–C 550 Chinese Writing and Rhetoric (3 cr.) P: Grade of C or higher in C544 or consent of the instructor. Practice in reading, writing, and speaking through analysis of modern prose and literary texts. Examination of how the Chinese frame discourse, so students may develop their ability to present ideas with precise diction, in appropriate registers, in extended discourse.

Language Pedagogy

EALC–C 525 Teaching Chinese as a Foreign/Second Language (3 cr.) Designed for graduate and advanced undergraduate students who have an interest in acquiring knowledge, skills, and experience in teaching Chinese as a foreign language. Taught in a seminar-practicum format, the course examines the contemporary paradigms of foreign language instruction, identifies critical issues in language pedagogy, and explores various techniques of teaching the four language skills (speaking, listening, reading, and writing). Active participation in the class is mandatory.

EALC–C 527 Practicum in Chinese Language Pedagogy (2–3 cr.) This course is eligible for deferred credit. Supervised application of language pedagogy. In an actual classroom students will apply the theories, paradigms, and approaches to language learning they have studied. Practicum experience developed in consultation with the advisor, with approval of the Director of Graduate Studies.

EALC–C 535 Chinese Curriculum and Material Design (3 cr.) For students interested in exploring the theories, issues, and principles of language curriculum design and acquiring practical experience of applying various syllabus frameworks to design sample Chinese materials. Emphasis on developing students' ability to analyze and synthesize factors contributing to an effective language learning program.

EALC–C 598 Pedagogy Project (1–4 cr.) This course is eligible for deferred credit. Demonstration of pedagogical understanding and skills. The project may take either of two forms: empirical study of pedagogical issues or significant materials development (e.g., set of course materials, course Web site, multimedia learning modules, testing instruments). Developed in consultation with the advisor, with approval of the Director of Graduate Studies.

Literature Courses

EALC–C 505 Topics in Chinese Studies (1–4 cr.) Graduate colloquium on aspects of Chinese literature, thought, or society. Topics will vary. A substantial portion of course work and readings will be in Chinese.

EALC–C 521-522 Readings in Chinese Literature III (3–3 cr.) Readings and discussions of works in Chinese literature of different genres: poetry, prose, and drama.

EALC–C 557 Chinese in Humanities (3 cr.) P: grade of B or better in C402 or equivalent proficiency. Advanced language practice associated with authentic academic tests in humanities disciplines. Emphasis on interpreting , analyzing, and presenting Chinese cultural concepts, artifacts, and events from a global perspective for an authentic purpose and within a performance assessment framework.

EALC–C 558-559 Readings in Chinese Literary Criticism III (3–3 cr.)

EALC–C 561-562 Readings in Chinese Social and Political Texts I-II (3–3 cr.)

EALC–C 567 Chinese in Social Sciences (3 cr.) P: grade of B or better in C402 or equivalent proficiency. Advanced language practice associated with authentic academic texts in social science disciplines. Emphasis on interpreting, analyzing, and presenting Chinese cultural concepts, practices, and events, from a global perspective for an authentic purpose and within a performance assessment framework.

EALC–C 571-572 Readings in Chinese Philosophical Texts III (3–3 cr.)

EALC–C 581-582 Readings in Chinese Historical Texts III (3–3 cr.)

Seminars and Research Methods Courses

EALC–C 511 Basic Reference Works in Chinese Studies (3 cr.) P: C362 or consent of instructor. Instruction in reading and using basic general reference tools for all aspects of Chinese studies.

EALC–C 600 Seminar in Chinese Studies (3–4 cr.) Graduate seminar on aspects of Chinese literature,

thought, or society. Topics will vary. A substantial portion of course work and readings will be in Chinese.

EALC–C 651 Seminar in Traditional Chinese Literature (4 cr.)

EALC–C 671 Seminar in Modern Chinese Literature (4 cr.)

EALC–C 681 Seminar in Chinese Thought (4 cr.)

Special Research

EALC–E 496 Foreign Study (East Asian Exchange Programs) (arr. cr.)

EALC–E 595 Individual Readings (1–6 cr.) Intended for advanced students.

EALC–C 701 M.A. Thesis (arr. cr.) This course is eligible for a deferred credit.

EALC–C 801 Ph.D. Thesis (arr. cr.)

EALC–G 901 Advanced Research (arr. cr.)

Japanese

Language and Linguistics Courses

EALC–J 101-102 Elementary Japanese I-II (2–2 cr.)

EALC–J 201-202 Second-Year Japanese I-II (2–2 cr.)

EALC–J 533-534 Third-Year Japanese I-II (3–3 cr.)

EALC–J 543-544 Fourth-Year Japanese I-II (3–3 cr.) P: A grade of C or better in J534 or equivalent proficiency. Emphasis on advanced reading skills.

EALC–J 506-507 Literary Japanese I-II (3–3 cr.) P: Grade of C or better in J534 or equivalent proficiency. A basic outline of the varieties of written Japanese known collectively as bungotai or “literary Japanese.” Initial emphasis on reading and close rhetorical and grammatical analysis of genres from the 10th through 15th centuries, with later attention to other periods and texts.

EALC–J 520 Introduction to Japanese Linguistics (3 cr.) Linguistic phenomena in Japanese from the descriptive and comparative points of view. Development of linguistic problem-solving skills, including consideration of sociological issues.

EALC–J 580 Japanese for Sinologists (3 cr.) P: A grade of B or better in J202 or equivalent proficiency. Introduction to Japanese scholarship on China. Emphasis on grammatical structures and stylistic conventions.

EALC–J 581-582 Modern Academic and Professional Japanese I-II (3–3 cr.)

Language Pedagogy Courses

EALC–J 525 Teaching Japanese as a Foreign/Second Language (3 cr.) Designed for graduate and advanced undergraduate students who have an interest in acquiring knowledge, skills, and experience in teaching Japanese as a foreign language. Taught in a seminar-practicum format, the course examines the contemporary paradigms of foreign language instruction, identifies critical issues in language pedagogy, and explores various techniques of teaching the four language skills (speaking, listening, reading, and writing). Active participation in the class is mandatory.

EALC–J 527 Practicum in Japanese Language Pedagogy (2–3 cr.) This course is eligible for deferred credit. Supervised application of language pedagogy. In an actual classroom, students will apply the theories, paradigms, and approaches to language learning they have studied. Practicum experience developed in consultation with the advisor, with approval of the Director of Graduate Studies.

EALC–J 598 Pedagogy Project (1–4 cr.) This course is eligible for deferred credit. Demonstration of pedagogical understanding and skills. The project may take either of two forms: empirical study of pedagogical issues or significant materials development (e.g., set of course materials, course Web site, multimedia learning modules, testing instruments). Developed in consultation with the advisor, with approval of the Director of Graduate Studies.

Literature Courses

EALC–J 505 Topics in Japanese Studies (1–4 cr.) With consent of the Director of Graduate Studies, may be repeated for no more than 12 hours of credit when topic varies. Graduate colloquium on aspects of Japanese literature, thought, or society. Topics will vary. A substantial portion of course work and readings will be in Japanese.

EALC–J 521 Readings in Traditional Japanese Literature (3 cr.) With consent of the Director of Graduate Studies, may be repeated for no more than 12 hours of credit when topic varies. Examination of major authors, works, genres, and criticism.

EALC–J 522 Readings in Modern Japanese Literature (3 cr.) Examination of major authors, works, genres, and criticism.

EALC–J 531-532 Readings in Japanese Social and Political Texts I-II (3–3 cr.)

EALC–J 541-542 Readings in Japanese Historical Texts I-II (3–3 cr.)

EALC–J 551-552 Readings in Japanese Literary Criticism I-II (3–3 cr.)

Special Research

EALC–E 496 Foreign Study (East Asian Exchange Programs) (arr. cr.)

EALC–E 595 Individual Readings (1–6 cr.) This course is eligible for deferred credit. Intended for advanced students.

EALC–J 701 M.A. Thesis (arr. cr.) This course is eligible for deferred credit.

EALC–J 801 Ph.D. Thesis (arr. cr.) This course is eligible for deferred credit.

EALC–G 901 Advanced Research (arr. cr.) This course is eligible for deferred credit.

Seminars and Research Methods Courses

EALC–J 511 Research Methods in Japanese Studies (3 cr.) Basic reference works in Japanese and Western languages, methods, and tools of research.

EALC–J 600 Seminar in Japanese Studies (3–4 cr.) Graduate seminar on aspects of Japanese literature,

thought, or society. Topics will vary. A substantial portion of course work and readings will be in Japanese.

EALC–J 641 Seminar in Premodern Japanese History (4 cr.)

EALC–J 642 Seminar in Modern Japanese History (4 cr.)

EALC–J 651 Seminar in Modern Japanese Literature (4 cr.) Seminar in modern Japanese literature and criticism. The topic will vary depending on the year the course is offered.

EALC–J 653 Seminar in Traditional Japanese Literature (4 cr.) Seminar in pre-modern Japanese literature and criticism. The topic will vary depending on the year the course is offered.

EALC–J 681 Seminar in Japanese Thought (4 cr.)

Korean

EALC–K 101-102 Elementary Korean I-II (2–2 cr.)

EALC–K 201-202 Second-Year Korean I-II (2–2 cr.)

EALC–K 301 Third-Year Korean I (3 cr.) P: A grade of C or better in K202 or equivalent proficiency. Primarily designed to develop and enhance students' reading ability through a variety of written materials; considerable emphasis on writing and conversational skills. Some 200 Chinese characters that are frequently used in Korean newspapers may be taught.

EALC–K 302 Third-Year Korean II (3 cr.) P: A grade of C or better in K301 or equivalent proficiency. Primarily designed to develop and enhance students' reading ability through a variety of written materials; considerable emphasis on writing and conversational skills. Some 200 Chinese characters that are frequently used in Korean newspapers may be taught.

EALC–K 431-432 Readings in Modern Korean Literature I-II (3–3 cr.)

EALC–K 501-502 Fourth-Year Korean I-II (3–3 cr.) P: A grade of C or better in EALC K302 or equivalent proficiency. Emphasis on advanced reading skills, featuring authentic writings such as newspaper editorials, essays, movie scenarios, and television news.

EALC–K 505 Topics in Korean Studies (1–4 cr.) Graduate colloquium on aspects of Korean literature, thought, or society. Topics will vary. A substantial portion of course work and readings will be in Korean.

EALC–K 527 Practicum in Korean Language Pedagogy (2–3 cr.) Supervised application of language pedagogy. In an actual classroom, students will apply the theories, paradigms, and approaches to language learning they have studied. Practicum experience developed in consultation with the advisor, with approval of the Director of Graduate Studies.

EALC–K 598 Pedagogy Project (1–4 cr.) Demonstration of pedagogical understanding and skills. The project may take either of two forms: empirical study of pedagogical issues or significant materials development (e.g., set of course materials, course Web site, multimedia learning modules, testing instruments). Developed in consultation with the advisor, with approval of the Director of Graduate Studies.

EALC–K 600 Seminar in Korean Studies (3–4 cr.) Graduate seminar on aspects of Korean literature, thought, or society. Topics will vary. A substantial portion of course work and readings will be in Korean.

Culture and Area Courses

EALC–E 394 Business and Public Policy in Japan (3 cr.)

EALC–E 496 Foreign Study (East Asian Exchange Programs) (arr. cr.)

EALC–E 505 Topics in East Asian Studies (1.5–4 cr.)

EALC–E 526 Computer-Enhanced East Asian Language Learning (3 cr.) P: Basic computer literacy. An examination of research and findings on the effectiveness of technology in language-skill development, and an exploration of the use of computer technology in foreign language learning, to equip students with concepts and tools to improve language studies.

EALC–E 533 Studies in Chinese Cinema (3 cr.) Critical and historical perspectives on Chinese cinema from the 1930s to the 1990s, including Taiwan and Hong Kong. Lectures and readings on the silent era, melodrama, musical, minority film, adaptation, the fifth generation, ideology, sexuality, urban cinema, and women's cinema.

EALC–E 554 Society and Education in Japan (3 cr.) Survey of social change in Japan with a focus on educational institutions, patterns of learning, educational thought, and the spread of literacy.

EALC–E 574 Early Chinese Philosophy (3 cr.) Origins of Chinese philosophical tradition in the classical schools of Confucianism, Taoism, Mohism, and Legalism. Explores contrasting agendas of early Chinese and Western traditions.

EALC–E 590 Contemporary Chinese Politics (3 cr.) In-depth introduction to the scholarly study of Chinese politics. Important topics include elites, institutions, political culture, ideology, policy making, protest, and center-local relations. Attention paid to issues of research methodology and primary resources.

EALC–E 592 Political Economy of East Asia (3 cr.) Examines the relationship between political circumstances and economic development through the experience of East Asia since World War II. Particular attention is given to the question of the state's role in promoting growth. Comparisons of countries throughout East Asia are combined with transnational and international perspectives.

EALC–E 593 China's Political Economy (3 cr.) Examination of China's development trajectory, the policy process, the political activism of marginalized groups and the emerging middle class, and signs that economic change is alternatively promoting democratization, political decay, or the entrenchment of the Communist Party. Historic and comparative perspectives ranging from case studies to macro analyses will be used.

EALC–E 595 Individual Readings (1–6 cr.) This course is eligible for deferred credit.

EALC–E 596 Readings in Pedagogy (1–3 cr.) Individualized readings in contemporary paradigms, critical issues, and techniques of teaching Asian languages.

EALC–E 597 M.A. Essay (1–4 cr.) This course is eligible for deferred credit. A capstone project recommended only for students pursuing a terminal M.A.; the essay is intended to strengthen and demonstrate control over the variety of scholarly skills learned through graduate course work, rather than to demonstrate potential to undertake doctoral work. Developed in consultation with the student's advisor with the approval of the Director of Graduate Studies.

EALC–E 600 Seminar in East Asian Studies (4 cr.) Studies in history, social sciences, and culture. Topics vary by semester depending on student needs and interests.

EALC–E 604 Seminar in East Asian Studies Scholarship (4 cr.)

EALC–E 700 M.A. Thesis (arr. cr.) This course is eligible for deferred credit.

Cross-Listed Courses

Comparative Literature

C546 Sexuality and the Arts (4 cr.)
C574 Japanese-Western Studies (4 cr.)
C575 Chinese-Western Studies I (4 cr.)
C576 Comparative Approaches to Chinese Literature(4 cr.)

Fine Arts

A560 Special Studies in Chinese Art (4 cr.)
A564 Art and Archaeology of Early China (4 cr.)
A566 Early Chinese Painting (4 cr.)
A567 Later Chinese Painting (4 cr.)
A662 Problems in Chinese Painting (4 cr.)

Folklore

F600 Asian Folklore/Folk Music (3 cr.)

History

G567 Premodern Japan (3 cr.)
G568 Early Modern Japan (3 cr.)
G569 Modern Japan (3 cr.)
G580 Early China (3 cr.)
G582 Imperial China I (3 cr.)
G583 Imperial China II (3 cr.)
G585 Modern China (3 cr.)
G587 Contemporary China (3 cr.)
H675 Colloquium in East Asian History (4 cr.)
H775 Seminar in East Asian History (4 cr.)[1]

Political Science

Y333 Chinese Politics (3 cr.)
Y334 Japanese Politics (3 cr.)
Y557 Comparative Politics Approaches and Issues (3 cr.)[1]
Y657 Comparative Politics (3 cr.)[1]

Religious Studies

R554 Religions of East Asia (3 cr.)
R654 The Taoist Tradition (3 cr.)
R655 East Asian Buddhism (3 cr.)
R657 Religion in Japan (3 cr.)

Theatre and Drama

T468 Non-Western Drama and Theatre (3 cr.)[1]

[1] This course will count toward fulfilling departmental requirements when it deals substantially with East Asian materials.

Economics

College of Arts and Sciences

Departmental E-mail: rcunning@indiana.edu

Departmental URL: www.indiana.edu/~econweb

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, Doctor of Philosophy in economics, and Doctor of Philosophy in economics and business (in cooperation with the Kelley School of Business)

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Twenty-five (25) credit hours of social science and business, including intermediate economic analysis. First-year differential and integral calculus and one semester of linear algebra are required for the Ph.D. and the M.A. Deficiencies in economics must be removed without graduate credit. Graduate Record Examination General Test (verbal, quantitative, and analytical writing sections) required.

Grades

At least a B (3.0) average in work taken for an advanced degree.

Master of Arts Degree

Course Requirements

A minimum of 30 credit hours, 24 of which must be taken in the Department of Economics, including 9 credits of theory and 6 credits of statistics. A minimum of 18 credit hours of course work in economics must be numbered E500 or above. Consult the Director of Graduate Studies for specific courses. Up to 6 credit hours are allowable for a thesis. In lieu of writing a thesis, a student may complete 6 credit hours of course work (beyond the required 30 credit hours) in one of the following research skills: operations and decision technologies, computer science, mathematics, or econometrics beyond E572. Courses used to fulfill a research skill requirement do not carry graduate credit.

Master of Arts for Teachers Degree

An individual study program of 36 credit hours will be developed for each student, normally including only courses that may be taken for graduate credit.

Doctor of Philosophy Degree

Fields of Study

Choices of fields offered for qualifying examinations must be approved by the Graduate Studies Committee. Fields of study currently available within the department are

advanced economic theory, development economics, development and transition economics, econometrics, economic history, games and experimental methods, growth theory, industrial organization, international trade, macroeconomics, monetary economics, and public economics. In addition, a field in finance is available in partnership with the Kelley School of Business. Fields of study in the Kelley School of Business that are available for the joint Ph.D. degree are accounting, finance, operations management, marketing, and operations and decision technologies. Information about other fields may be obtained from the Director of Graduate Studies.

Course Requirements

A total of 90 credit hours, including the theory sequence E520, E521, E522, E621, E622, and the econometrics-statistics sequence E571, E572, E671. All Ph.D. students join a workshop after passing their core theory exams. In addition, starting in their third year, students have to formally enroll in a workshop course for three semesters. There is a minimum requirement of 60 credit hours of course work. A minimum of 57 credit hours must be taken in economics.

Research-Skill Requirement

Proficiency in mathematics, operations and decision technologies, computer science, or econometrics/ applied statistics. Courses used to fulfill a research skill requirement do not carry graduate credit.

Core Theory Examination

Core theory examinations in macroeconomics and microeconomics are taken at the end of the first year in residence. A maximum of two attempts will be permitted on each section. The exams are given in May, and retakes are administered in August.

Qualifying Field Examinations

The Ph.D. candidate must successfully complete at least three fields: one primary field and two supporting (secondary) fields. One of these fields may be taken outside the Department of Economics. A qualifying examination must be taken in the primary field; courses in supporting fields must be passed with grades of B or better. Consult the economics department's Graduate Study Guide for further information.

Third-Year Paper Requirement

Ph.D. students are required to write a substantial research paper before the end of the spring semester of their third year. The paper will be presented at a departmental conference at the end of April or the beginning of May of the third year. The goal should be that this paper is of sufficient quality to be the first essay of the dissertation.

Dissertation Proposal

The proposed research for the dissertation must be approved by the research committee and presented at a department workshop.

Final Examination

Oral defense of the dissertation.

Faculty

Chairperson

Professor Gerhard Glomm*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Robert Campbell* (Emeritus), H. Scott Gordon* (Emeritus, History and Philosophy of Science), Pravin Trivedi*

Chancellor's Professor

Roy Gardner*
Rudy Professor
Pravin Trivedi*

Wisnewsky Professor of Human Studies

Joon Park*

Professors

Michael Alexeev*, Robert Becker*, William Becker* (Emeritus), Edward Buffie*, Fwu-Ranq Chang*, Yoosoon Chang*, Gerhard Glomm*, Michael Kaganovich*, Paul Kuznets* (Emeritus), Eric Leeper*, Lloyd Orr* (Emeritus), Frank Page Jr.*, Phillip Saunders* (Emeritus), George von Furstenberg* (Emeritus), James Walker*, Elmus Wicker* (Emeritus), Arlington Williams*

Associate Professors

Elyce Rotella* (Emeritus), Willard Witte* (Emeritus)

Assistant Professors

Rubiana Chamarbagwala, Juan Carlos Escanciano*, David Jacho-Chavez, Bulent Guler, Yoon-Jin Lee, Todd Walker*

Director of Graduate Studies

Professor Eric Leeper*, Wylie Hall 229, (812) 855-8453

Courses

ECON–E 471 Econometric Theory and Practice I (3 cr.) P: E370 or either MATH M119 or M211 or consent of instructor. Emphasis is on the probability and statistical theory underpinning the classical linear regression model. Special topics include finite and asymptotic properties of point and interval estimation, hypothesis testing and model building. Several software packages are used in computer lab applications.

ECON–E 472 Econometric Theory and Practice II (3 cr.) P: E471. Emphasis is on the matrix formulation and computer estimation methods for single and multiple equation models using economic and business data. Attention is given to the assumptions required for testing sets of coefficients and model structures. Special topics include heteroscedasticity, multicollinearity, errors in variables, simultaneity, time-series analysis, limited dependent variables, sample selection, and alternatives to least-squares estimation.

ECON–E 501 Seminar in Economics (3 cr.) P: Consent of instructor. Advanced topics in economics ranging across all fields.

ECON–E 502 Teaching Undergraduate Economics (3 cr.) Planning, presenting, and evaluating undergraduate economics teaching. Content includes learning theory, instructional objectives, course planning, textbook selection, lecturing and discussion techniques, visual aids and simulation, constructing test and homework problems, grading, student evaluation of instruction, practical classroom teaching problems, and survey of evaluation literature.

ECON–E 520 Optimization Theory in Economic Analysis (3 cr.) P: Calculus and linear algebra. Introduction to concepts and techniques of optimization theory applied in modern micro- and macroeconomics. Theory and application of Lagrange multipliers, comparative statics analysis, value functions and envelope theorems. Elements of dynamic programming and other methods of economic dynamics.

ECON–E 521 Theory of Prices and Markets I (3 cr.) Develops the methodology of economic analysis and teaches the tools and language of price theory. Fundamental elements of consumer theory, producer theory, and economics of uncertainty. Emphasis on comparative statics and the duality theory. Topics include welfare analysis, the theory of price indices, quality of goods, revealed preferences, the theory of derived demand, expected utility theory, attitudes toward risk, and various measures of riskiness.

ECON–E 522 Macroeconomic Theory I (3 cr.) Introductory course on macroeconomic dynamics; covers growth models and asset pricing theories, endogenous growth theories, optimal growth problems, and competitive dynamic equilibrium models. Dynamic programming tools introduced as needed. All models are cast in a discrete time setup; presents deterministic and stochastic theories.

ECON–E 529 Economic History (3 cr.) P: E521 or consent of instructor. Use of economic analysis and econometric techniques to examine topics in the development and institutions of the U.S. and European economies.

ECON–E 530 International Trade (3 cr.) P: E521, E621, or consent of instructor. Introduction to theories of international trade (including such topics as pattern of trade, gains from trade, testing trade theories) and analysis of trade policies (including such topics as tariffs, quotas, and strategic trade policy).

ECON–E 541 Labor Market Analysis (3 cr.) P: E520 or E521, or consent of instructor (Bloomington); P: Consent of instructor (Indianapolis). An analytical approach to the labor market. Theoretical underpinning and statistical testing of issues in demand and supply of labor, household decision making, human capital, contract theories, unionism, minimum wages, and discrimination.

ECON–E 550 Monetary Theory and Organization (3 cr.) Theory and practice of monetary control; supply and demand functions for money; instruments of monetary control; channels through which money exerts an influence on the economy.

ECON–E 551 Monetary Economics II (3 cr.) Introduces alternative models of monetary economies; covers topics in monetary economics such as money and growth and optimal money growth. The course takes a unified approach to macroeconomic policy, treating monetary and fiscal policy as jointly determining macroeconomic equilibria. May include discussion of empirical work on money.

ECON–E 571 Econometrics 1—Statistical Foundations (3 cr.) P: Undergraduate courses in statistics and calculus. The probability bases for statistical estimation and testing are introduced in the context of issues, theories, and data found in economics. The classical linear regression model is presented as the starting point for multivariate analyses in econometrics. Students work with various computer programs in and out of the scheduled class periods.

ECON–E 572 Econometrics 2—Regression and Time Series (3 cr.) P: E571 or equivalent. Regression and time series. Departures from classical regression. Generalized least squares; heteroskedastic models; dynamic regression. Basic asymptotics. Measurement errors and instrumental variables. Some standard nonlinear models. Course covers theory and data analysis.

ECON–E 585 Industrial Organization and Control (3 cr.) P: Consent of instructor (Indianapolis only). Analysis of interrelated structure, behavior, and performance in industrial markets and multimarket corporations; multidimensional nature of competitive processes. Public controls. Topics include patterns of oligopoly, vertical integration, entry barriers; “cartelized” coalescence, limit pricing, price discrimination, long-term contracts; capacity expansion and utilization, resource reallocation, and innovation.

ECON–E 591 Macro Topics in Economic Development (3 cr.) P: E521, E522, or consent of instructor. Analysis of new theories of economic growth and various issues related to macroeconomic policy in less-developed countries. Topics include fiscal reform, exchange rate policy, financial liberalization, and money vs. exchange rate–based stabilization programs.

ECON–E 592 Trade Policy and Economic Development (3 cr.) Examines the major issues surrounding the conduct of trade policy in less-developed countries. Covers arguments for and against import-substituting vs. export-promoting policies, the nature of optimal commercial policy, alternative strategies for liberalization of the trade regime, and the pros and cons of direct foreign investment.

ECON–E 621 Theory of Prices and Markets II (3 cr.) P: E521, calculus, and linear algebra. Analysis of equilibrium, first- and second-order conditions; statistical derivation of demand and cost curves; activity analysis; general equilibrium; welfare economics; microeconomics of capital theory; pure oligopoly and game theory.

ECON–E 622 Macroeconomic Theory II (3 cr.) P: E522, calculus, and linear algebra. Extends general equilibrium models from E522 by introducing nominal variables, monetary and fiscal policies; some exposure to alternative dynamic models, nominal and real rigidities, market imperfections, dynamically consistent policies. Numerical methods introduced to simulate dynamic stochastic general equilibrium models. Time series methods

presented to discuss empirical implications of aggregate models.

ECON–E 624 Mathematical Economics I (3 cr.) P: One year of calculus, one semester of linear algebra, or consent of instructor. Introduction to stochastic control theory with applications to economics. Covers Wiener process, stochastic integration, Ito's lemma and the stochastic Bellman equation. Applications to economics include optimal growth theory, the inverse optimal problem, adjustment cost theory of supply, exhaustible resources, optimal consumption and portfolio rules, and transactions demand for money.

ECON–E 625 Mathematical Economics II (3 cr.) P: One year of calculus, one semester of linear algebra, or consent of instructor. Mathematical analysis of problems of motion via Central Principle of Motion; dynamic efficiency of centralized and decentralized economic systems; differential games.

ECON–E 626 Game Theory (3 cr.) P: E521, E621. Mathematical analysis of strategic interaction. Noncooperative games played once or repeatedly, with perfection or imperfect information. Necessary condition for a solution (equilibrium), as well as sufficient conditions (refinements). Cooperative games, such as bargaining and market games. Numerous applications, including experimental games.

ECON–E 627 Experimental Economics (3 cr.) P: Intermediate microeconomics and statistics. Focuses on the use of laboratory experimental methods in applied microeconomics. Specific application areas will include the analysis of resource allocation mechanisms for both private and public goods and individual choice under uncertainty using both human and nonhuman subjects.

ECON–E 628 Advanced Macroeconomic Theory (3 cr.) P: E622 or equivalent. The course provides an in-depth treatment of major areas in macroeconomics, advancing to the several frontiers at which its theory is currently most tested. These include convergence to rational expectations equilibrium, near-rational solutions, non-Walrasian equilibrium, and the management of incentives and macroeconomic disturbances through contractual arrangements.

ECON–E 629 Open Economy Macroeconomics (3 cr.) P: E622. Combines international finance and open-economy macroeconomics with history and current functioning of the international financial system and the policy and exchange regime choices of countries within it. Explorations include determinants of current-account balances and exchange-rate dynamics as well as implications of the international mobility of goods, financial services, and capital, international portfolio and direct investment behavior, and financial derivatives.

ECON–E 630 International Trade II (3 cr.) P: E530. Second part of the graduate sequence in international trade. Focuses on analyzing strategic situations in an international context. Topics include imperfect competition in international trade, strategic trade policy, trade policy under incomplete information, and tariff and quota games.

ECON–E 641 Quantitative Studies in Labor Economics (3 cr.) P: E541, E571, and at least concurrent registration in E572 or consent of instructor. Emphasis on the application of statistical and econometric theory and methods in the analysis of current issues in labor economics. The application of models involving discrete choice, search, screening, signaling, contracts, tournaments, and Markov processes to explain various labor market phenomena will be reviewed.

ECON–E 660 Public Economics I (3 cr.) P: E621 or concurrent registration. Analysis of public expenditures and taxation from a microeconomic viewpoint. Topics include externalities, pure and impure public goods, efficiency and distributional effects of taxation, optimal taxation theory, benefit-cost analysis.

ECON–E 661 Public Economics II (3 cr.) P: E660. In-depth analysis of selected aspects of public expenditures and taxation. Illustrative topics: intertemporal and aggregative effects of tax and expenditure policies, emphasizing saving and investment incentives; taxation of risky assets; taxation of imperfectly competitive industries; benefit-cost analysis under uncertainty; public choice.

ECON–E 671 Econometrics 3—Nonlinear and Simultaneous Models (3 cr.) P: E572 or equivalent. Introduction to econometric theory. Parameter estimation for single and multiple equation systems. Inference and hypothesis testing. Monte Carlo studies.

ECON–E 672 Macroeconometrics (3 cr.) P: E671 or equivalent. Advanced topics in econometrics. Estimation of dynamic equation systems. Spectrum analysis. Problems of design for large macroeconometric models.

ECON–E 673 Microeconometrics (3 cr.) P: E572 or equivalent. Microeconometrics with applications to labor, health, and public economics. Extensive coverage of limited dependent variable and panel data models. Empirical implementation is an essential component of the course.

ECON–E 685 Advanced Industrial Organization (3 cr.) P: E585. Extends the coverage in E585. Provides greater in-depth coverage of contemporary industrial organization problems from a theoretical perspective and provides coverage of important industrial organization topics not discussed in E585. Topics include mechanism design, signaling and screening, merger theory, incomplete contracting and the firm, and antitrust and regulation.

ECON–E 698 Comparative Economics and Economics of Transition (3 cr.) P: Consent of instructor. Modern approaches to analysis of nonmarket economic systems and mechanisms. Emphasis on the incentives generated by these mechanisms and information flows in the system. Since the field of comparative economics is both theoretical and institutional, students are required to read both analytical pieces containing formal models and descriptive papers.

ECON–E 713 Seminar in Economic History (3 cr.) P: E529 or consent of instructor. Advanced topics in economic history (U.S. and European) with particular emphasis on recent debates in the literature of the new economic history. Application of economic theory and econometric techniques to historical problems.

ECON–E 724 Seminar in Economic Theory (3–6 cr.) P: Advanced topics in business cycles, general equilibrium,

growth, mathematical economics, and welfare economics. Offered periodically.

ECON–E 730 Seminar in International Trade (3 cr.) P: Third part of the graduate sequence in international trade; intended for those writing theses in the field. Focuses on a deeper understanding of topics such as the political economy of protection, cooperation in repeated tariff games, trade negotiations, and multinational enterprises.

ECON–E 748 Seminar in the Economics of Labor and Human Resource Development (3 cr.) P: E541 or consent of instructor. Selection from current issues in labor: labor markets, comparative labor economics, human capital, workforce planning, and labor relations.

ECON–E 752 Seminar in Money (3 cr.) Current topics in advanced monetary and banking theory. Preparation of a research paper and oral presentation to a seminar.

ECON–E 762 Seminar in Public Economics (3 cr.) Advanced topics in public economics. Preparation of a research paper and oral presentation to the seminar.

ECON–E 770 Seminar in Econometrics (3 cr.) Advanced topics in econometrics in time series and/or cross-sectional data analysis.

ECON–E 785 Seminar in Industrial Organization (3 cr.) Third course in the graduate industrial organization sequence; intended for those writing in the field. Topics include bargaining, reputation, oligopoly, research and development, vertical restraints, entry deterrence, transaction costs, and international industrial organization.

ECON–E 792 Workshops in Problems of Development (3 cr.) In-depth study of specific underdeveloped area or specific topic in problems of underdevelopment.

ECON–E 793 Seminar in Planning Strategies and Techniques (3 cr.) P: E591. Analysis of strategic choices and planning methods in Western economies and socialist economies in transition. Theory and practice of planning in underdeveloped countries.

ECON–E 800 Research in Economics (arr. cr.) This course is eligible for a deferred grade.

ECON–E 808 Thesis (M.A.) (arr. cr.) This course is eligible for a deferred grade.

ECON–E 809 Thesis (Ph.D.) (arr. cr.) This course is eligible for a deferred grade.

ECON–E 810 Readings in Economic History (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 824 Readings in Economic Theory (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 830 Readings in International Trade (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 840 Readings in Economics of Labor and Human Resource Development (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 850 Readings in Monetary Economics (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 860 Readings in Public Economics (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 870 Readings in Advanced Econometrics (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 880 Readings in Industrial Organization (1–6 cr.) This course is eligible for a deferred grade.

ECON–E 890 Readings in Development and Economics of Transition (1–6 cr.) This course is eligible for a deferred grade.

Education

School of Education

Departmental E-mail: educate@indiana.edu

Departmental URL: http://site.educ.indiana.edu

Departmental Phone Number: (812) 856-8504

Curriculum

Degree Offered

The Doctor of Philosophy (Ph.D.) degree is offered through the University Graduate School. In addition, the School of Education offers the Master of Science (M.S.) in Education, the Specialist in Education (Ed.S.), and the Doctor of Education (Ed.D.) degrees. (See the School of Education Graduate Program Bulletin.)

Doctor of Philosophy Degree

Fields of Study

Counseling psychology; curriculum and instruction; learning and developmental sciences; higher education; history, philosophy and policy studies in education; inquiry methodology; instructional systems technology; language education; urban education; and special education.

Program of Studies

The Ph.D. degree with a major in education is pursued under the direction of a committee appointed by the University Graduate School and the School of Education. As with other Graduate School doctoral programs, a minimum of 90 credit hours of course work is required. This includes a major (selected from the fields of study listed previously), a minor, a series of research courses, and a dissertation. Written and oral qualifying examinations are taken following course work; a final oral defense of the dissertation research completes the program. Up to 30 credit hours of graduate course work may be transferred from other universities, with the approval of the advisory committee.

Admission

Admission recommendations are made by program area and School of Education admission committees and are based on graduate and undergraduate grades (especially in academic courses), scores on the General Test of the Graduate Record Examination (GRE), and letters of recommendation. The TOEFL examination is required for all international applicants. Online applications may be accessed through the School of Education Office of Graduate Studies Web site at http://www.indiana.edu/~grdschl/admissions.php.

Students earning a Ph.D. degree in education must fulfill all requirements of the University Graduate School (as found in this bulletin) and of the School of Education

(as found in the School of Education Graduate Program Bulletin).

Faculty

Dean

Professor Gerardo M. González*

Associate Dean for Graduate Studies

Elizabeth Boling*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professors

Robert Arnove* (Emeritus), Roger Farr* (Emeritus), George D. Kuh* (Emeritus), Frank Lester* (Emeritus), Martha McCarthy*, Rex A. Stockton*

Armstrong Chairs

Jerome Harste* (Emeritus; 1999–2005), Frank Lester* (Emeritus; 2000–2005), Diana Lambdin* (2005–2010), Peter Kloosterman* (201-2015)

Jacobs Chair

Thomas Duffy* (1998–2000), Donald Cunningham* (Emeritus; 2000–2005), Sasha Barab*(2005-2010), Thomas Brush* (2010-2015)

Otting Chair

Erna Alant*(2009-2014)

Rudy Professor of Learning Sciences

Richard Arthur Lesh*

Professors

Valarie Akerson*, Joyce Alexander*, Trudy Banta* (I), Keith Barton*, Barbara Bichelmeyer*, Curtis Bonk*, Marilynne Boyle-Baise*, Catherine Brown, Barry Bull*, Cary Buzzelli*, Phil Carspecken*, Nancy Chism* (I), Gary Crow*, Jack Cummings*, Ginette Delandshere*, David Flinders*, Theodore Frick*, Gerardo M. González*, Jesse Goodman*, Don Hossler*, Thomas Huberty*, Christine Leland* (I), Bradley Levinson*, Mitzi Lewison*, David Mank*, Terrence Mason*, Mary McMullen*, Larry Mikulecky*, D. Keith Morran* (I), Chao-Ying Joanne PengJonathan Plucker*, Charles Reigeluth*, Patricia Rogan* (I), Jose Rosario* (I), Heidi Ross*, Thomas Sexton*, Robert Sherwood*, Martin Siegel*, Russell Skiba*, Neil Theobald*, Vasti Torres*, Susan Whiston*

Associate Professors

Jeffrey Anderson*, John Bean*, Beth Berghoff* (I), Jacqueline Blackwell* (I), Elizabeth Boling*, Gayle Buck*, Gretchen Digman ButeraStephanie Carter*, James Damico*, Barbara Dennis*, Suzanne Eckes, David Estell*, Mary Fisher* (I), Enrique Galindo*, Ken Hay*, Robert Helfenbein, Jr.*(I) Dan Hickey*, Mary Beth Hines*, Signe Kastberg* (I), Robert Kunzman*, Lara Lackey*, Gerardo Lopez*, Marjorie Cohee Manifold*, Luise Prior McCarty*, Alex McCormick*, Brendan Maxcy* (I), Anastasia Morrone*, Khaula H. Murtadha* (I), Jomo Mutegi (I), Martha Nyikos*, Theresa Ochoa* Faridah Pawan*, Douglas Priest*, Gary Pike*(I), Rebecca Martinez Reid*, Floyd Robison* (I), Joshua Smith*(I), Anne Dopkins Stright*, Margaret Sutton*, Annela Teemant (I), Chalmer Thompson* (I), Michael Tracy*, Elizabeth Vallance*, Andrea Walton*

Assistant Professors

Donna Adomat, Scott Bellini, Nathaniel Brown, Yonjoo Cho, Serafin Coronel-Molina*, Peter Cowan, Dionne Cross, Joshua Danish, Dionne Danns, Ryan Flessner (I), Melissa Gresalfi, Amy Hackenberg, D. Ted Hall, Ray Haynes, Crystal Hill (I), Allison Howland(C), Robin Hughes (I), Thomas Nelson Laird*, Anne Leftwich, Adam Maltese, Sylvia Martinez, Meredith Park-Rogers, Kylie Peppler, Leslie Rutkowski, Beth Samuelson, Hannah Schertz, Dwight Schuster (I), Samantha Parades Scribner(I), W. Raymond Smith, Jesse Steinfeldt, Jane Stephenson (I), Thu Suong Thi Nguyen (I), Erik Tillema (I), Ellen Vaughan, Crystal Walcott (C), Mary Waldron, Stacy Weiss, Karen Wohlwend, Y. Joel Wong, Elizabeth Wood (I), Tarajean Yazzie-Mintz

Full Clinical Faculty

Laura Stachowski

Associate Clinical Faculty

Keith Chapin, Mary Jo Dare (I), Barbara Erwin, Carole-Anne Hossler, Paula Magee (I) Elizabeth McCrea

Assistant Clinical Faculty

Kate Baird (C), Danielle DeSawal, Barbara Erwin, Lynn Gillman, Natasha Flowers (I), Lonni Gill (I), Ilknur Kelceoglu (C), Anne Ociepka (I), Aija Pocock (C), Jadora Sailes (I), Joy Seybold (I), Deborah Winikates (C)

Emeriti

Billy L. Abel (I) Anita Aldrich*, Hans Andersen*, Jean Anderson*, Christine Bennett*, William Best (I), Harbans Bhola*, Ellen Brantlinger*, Arthur D. Brill (I), Ron Britton (I), Laurence Brown*, Edward Buffie*, Leonard Burrello*, Ledford Carter, Michael Chiappetta*, Gilbert Clark*, Michael Cohen (I), Ron Dehnke (I), Ivor Davies*, Richard Dever*, Merle Draper*, Earl Dvorak*, J. Marvin Ebbert (I), Lee Ehman*, Susan Eklund*, Meryl Englander*, Gene Faris*, Albert Fink*, Malcolm Fleming*, Thomas D. Froehle*, Dorothy Gabel*, Robert Gibson*, Richard Gousha*, Thomas Gregory*, Samuel Guskin*, Dale Hall, Robert Harris*, Stuart Hart (I), Robert Heinich*, Ruth E. Holland (I), Ernest Horn*, Gary Ingersoll*, Edward Jenkinson*, Alice Jwaideh*, Susan Klein*, Dennis Knapczyk*, DeWayne Kurpius*, John LeBlanc*, William Lynch*, George Maccia*, James Mahan*, Golam Mannan (I), Gerald Marker*, Milton Marten*,Wendell F. McBurney (I), Edward McClellan*, Jerry McIntosh*, John McKinley*, Howard Mehlinger*, Marianne Mitchell*, Michael Molenda*, Daniel Mueller*, Charlie Nelms, Anabel Newman*, Anna Ochoa*, Norman Overly*, Vernon Pace*, John Patrick*, Lewis Polsgrove*, Joan Prentice*, Gerald Preusz (I), Sharon Pugh*, Edward Robbins (I), Dale Scannell, Thomas Schwen*, Myrtle Scott*, Robert Shaffer*, Mendel Sherman, Carmen Simich-Dudgeon, Carl Smith*, Frederick Smith*, Gerald Smith*, Vernon Smith*, Josephine Spear*, Elizabeth Steiner*, James Walden*, Donald Warren*, James Weigand*, Barbara Wilcox (I),

Barbara Wolf*, Hugh Wolf (I), Leslie Wood (I), Virginia Woodward*, Enid Zimmerman*

(I) after a faculty member's name indicates that the person teaches at Indiana University-Purdue University Indianapolis; (C) at Indiana University-Purdue University Columbus.

English

College of Arts and Sciences

Departmental E-mail: engdept@indiana.edu

Departmental URL: www.indiana.edu/~engweb

Curriculum

Degrees Offered

Master of Arts, Master of Fine Arts, and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

The application deadline for the M.A./Ph.D. and M.A. programs in English is January 1 of each year for the following fall. Undergraduate major or its equivalent. Graduate Record Examination, both the General Test and the Subject Test in English Literature. A potentially superior student who has not majored in English may be admitted conditionally, but must remove deficiencies without graduate credit. Students who wish to be admitted for the M.A./Ph.D., M.A., or M.F.A. in Creative Writing must submit samples of their work. The application deadline for the M.A. or M.F.A. in Creative Writing is January 1 for the following fall.

Foreign Language Requirements

For the M.A., students will demonstrate reading proficiency in one foreign language. For the Ph.D., students will demonstrate either (a) proficiency in depth in one foreign language, or (b) reading proficiency in two foreign languages. Students will select their foreign language(s) in consultation with the director of graduate studies.

Combined B.A. and M.A.

Candidates for a combined degree must fulfill all requirements for the M.A. (including the language requirement), as well as general and major requirements for the B.A. in English. Upon completion of the 116 credits, including fulfillment of requirements for the English major, students with a minimum GPA of 3.5 overall and 3.7 in English may apply for conditional admission to the graduate program their senior year, which may be counted toward the completion of the M.A. degree in a fifth year of study. (At the discretion of the director of graduate studies, an otherwise qualified student who is still completing an honors thesis may apply for conditional admission.) No courses used to satisfy the B.A. requirements may be applied toward the M.A. The Graduate Record Examination, both General Test and Subject Test in English Literature, is required and must be taken before admission is completed following the final semester of undergraduate study.

Grades

M.A. students must maintain a 3.0 (B) grade point average; M.F.A. and Ph.D. students, a 3.5 grade point average. Admission to the Ph.D. normally requires a 3.7 grade point average and the recommendations of graduate faculty.

Master's Degrees

Master of Arts Degree with Concentration in Literature

Course Requirements

A minimum of 30 credit hours, including:

1. One 700-level seminar
2. At least two courses in fields of literature and culture before 1800
3. At least two courses in fields of literature and culture after 1800

Up to 8 credit hours in graduate courses outside the department may, with the prior approval of the director of graduate studies, be counted toward the degree.

Foreign Language: One, reading proficiency. Language competency will be verified by the relevant foreign language department or program.

Thesis: Optional; if elected, 4 hours of credit.
Final Examination: None.

Master of Arts Degree with Special Field Concentration

Course Requirements

A minimum of 30 credit hours, including

1. One 700 level seminar
2. At least three courses in a single area of concentration to be chosen in consultation with the director of graduate studies (for example, a genre such as the novel, a period such as the Middle Ages, a specialty such as postcolonial studies, American literature and culture, feminist theory, or composition, literacy, and culture).

Up to 8 credit hours in graduate courses in a related field outside the department may, with the prior approval of the director of graduate studies, be counted toward the degree.

Foreign Language: One, reading proficiency. Language competency will be verified by the relevant foreign language department or program.

Thesis: Optional; if elected, (4 hours of credit).
Final Examination: None.

Note: Students wishing to enter the doctoral program on completion of this M.A. must apply for admission. For admission to the Ph.D. program with concentration in literature, candidates must satisfy the distribution requirements for the M.A. in literature.

Master of Arts Degree with Concentration in Writing

Course Requirements

W611–W612 or W613–W614; five departmental courses in literature, literary criticism, or English language. Poets may substitute Comparative Literature C570 Theory and Practice of Translation for one of the five required departmental courses; writers of fiction may substitute Theatre and Drama T453 or T454 Playwriting.

Thesis: Required; the candidate must submit, for 4 hours of credit, a body of creative writing of high literary merit and genuine promise.

Final Examination: None.

Master of Arts Degree with Concentration in Language

Course Requirements

A minimum of 30 credit hours, including

1. G500, G780.
2. At least 12 further credit hours in English language courses, of which at least one course must be selected from G601, G602, G651, and G655.

Thesis: Optional; if elected, 4 hours of credit.

Final Examination: A four-hour written examination. See director of graduate studies for details.

Master of Arts for Teachers Degree

Prerequisite

Public-school certification in English. Applicants lacking no more than 6 credit hours for certification may be permitted to complete the certification requirements as part of the degree program.

Course Requirements

A total of 30 credit hours, in graduate English courses (at least 24 of these 30 credit hours must be taken on the Bloomington campus); if a minor is to be professionalized, at least 12 credit hours in the subject area. No undergraduate courses will be counted toward the degree.

Thesis and Final Examination: None.

Master of Fine Arts in Creative Writing

Course Requirements

A total of 60 credit hours, including 16 credit hours of writing workshops (W611–W612 or W613–W614); four courses in literature, culture and language (12–16 hours), at least two of which are on the 600 level or above, from offerings from English, African American and African Diaspora Studies, Comparative Literature, and/or Communication and Culture (courses from other departments to be approved on an individual case basis by the director of creative writing in consultation with the director of graduate studies); and W554; and W664, or W680. Those teaching in W103 Introductory Creative Writing are required to take W554 in their first semester of teaching. Students can take up to 12 credit hours in W699 M.F.A. Thesis. The remaining credit hours are elective. At least 48 credit hours of the degree requirements must be completed in residence.

Thesis

Required; the student must submit, for 4–12 hours of credit, a book-length manuscript.

Dual Master of Arts in English and Master of Library Science Degree

Admission Requirements

Undergraduate major or its equivalent. Graduate Record Examination, both General Test and Subject Test in English Literature. A superior student who has not majored in English may be admitted conditionally, but must remove deficiencies without graduate credit. Admission to each of the two master's programs is approved separately on the same basis as for other applicants not in the dual program.

Course Requirements

Study for these two degrees can be combined for a total of 54 credit hours rather than the 66 credit hours required for the two degrees taken separately. Students take 24 credit hours in English. All students must fulfill the core requirements as outlined in the English department's Master of Arts with Concentration in Literature or Special Field Master of Arts degree requirements. No thesis or examination is required for the M.A. degree in English. Students take 30 credit hours in library science, including L524; L505 or L520; L528; L509, L643 or L651; L527 or another management course; and L623. The remaining 12 credit hours are electives chosen in consultation with the library science graduate advisor.

Foreign Language Requirements: For the M.A., students will demonstrate reading proficiency in one foreign language. For the Ph.D., students will demonstrate either (a) proficiency in depth in one foreign language, or (b) reading proficiency in two foreign languages. Students will select their foreign language(s) in consultation with the director of graduate studies

Prerequisites: None.

Doctor of Philosophy Degrees

Admission

Requirements: Students are eligible for admission to the Ph.D. programs upon successful completion of the M.A. requirements.

Doctor of Philosophy Degree with Concentration in Literature

Course Requirements

A total of 90 credit hours; students will be required to take 16 credit hours in English beyond the 30 credit hours required for the M.A. At least four 700-level seminars in English are required for the Ph.D. Students must also satisfy course requirements for a graduate minor (see below). Students transferring into the department with M.A. degrees from other universities may be required to take several more courses than the minimum.

Foreign Language: Two languages, reading proficiency, or one language at the level of in-depth proficiency. Language competency will be verified by the relevant foreign language department or program.

Doctor of Philosophy Degree with Concentration in Composition, Literacy, and Culture

Course Requirements

A total of 90 credit hours, including at least 16 credit hours beyond the 30 credit hours required for the M.A. degree, to include at least three 700-level departmental seminars. The total must include a course in language/discourse analysis, and a course that brings a strong historical dimension to the study of writing. Information about relevant courses, including those offered by

other departments, is available from the chair of the Composition Committee and the student's advisory committee.

Periodic Review

Each year the graduate faculty will examine the grades and instructors' reports on all students and will discourage from further work those whose achievements and potential are below standard. Students who fail to maintain a 3.7 GPA or who accumulate three or more grades of Incomplete will be placed on departmental probation.

Minors

Ph.D. students in English may take minors in the following departments and programs: American studies, African American and African Diaspora studies, art history, comparative literature, cultural studies, English and German philology, film studies, folklore, French, gender studies, German, Greek, history, Italian, journalism, Latin, linguistics, medieval studies, performance studies, philosophy, religion, Renaissance studies, Slavics, Spanish, theatre and drama, Victorian studies, and West European studies. Requirements for the minor are set by the minor department.

The Department of English offers the following minors: American literature, British literature, children's literature, pedagogy, creative writing, English and Germanic philology, English language, literary theory, and textual studies. Minors within the department must be approved by the director of graduate studies.

Qualifying Examination

Upon completion of doctoral course work, students will prepare and take a doctoral qualifying examination. The examination consists of two parts: an oral examination based upon a reading list and the defense of a written dissertation prospectus. Assuming the student enters the program without an M.A., the exams are taken in his or her fourth year in the program. The oral examination tests a student's qualifications as a specialist in his or her chosen field; the prospectus and defense test a student's qualifications and readiness for undertaking the dissertation. Part one of the exam is taken in September; the prospectus should be completed the following spring and defended by the second week of May. Students pursuing a dual-degree PhD are allowed some flexibility in the timing of the qualifying exam. Further details of the procedure are available from the director of graduate studies (director of graduate studies).

Dissertation Prospectus/Research Proposal

Following the successful completion of the first part of the qualifying examination, the student names his dissertation committee and registers for W795, the dissertation prospectus writing workshop taught each spring by the director of graduate studies. The prospectus and bibliography are written in consultation with supervisory faculty and with the instructor of W795. When the prospectus is ready to be approved, the student submits it to his committee and arranges a time for the defense of the prospectus (which constitutes the final part of the Qualifying Exam). In this two-hour oral exam, members of the dissertation committee examine the claims of the prospectus as well as the dissertation research proposed, and assess the student's preparedness to undertake a long-term independent research project. The committee may ask for further revisions of the prospectus. The student must revise the prospectus as needed and submit it to the director of graduate studies no later than the end of May. The prospectus may be re-submitted and the defense repeated once within 6 months of the first attempt.

Research Proposal

After the dissertation proposal has been approved, the student will nominate a research committee consisting of no fewer than three members of the English department faculty and a representative of the minor.

Final Examination: Oral dissertation defense, at the completion of the dissertation project.

Ph.D. Minor in Comparative Ethnic and Postcolonial Studies

The CEPS minor enables students to analyze constructions of ethnicity and situation expressive cultural production within the context of geopolitical relations. Four courses (4 credits each), to include Introduction to Comparative Ethnic and Postcolonial Studies, one further course each in ethnic and in postcolonial studies, and one course of the student's choosing with relevant content, subject to approval by the minor advisor, must be taken. At least one course must be outside the English Department. The capstone experience will be provided by an ongoing colloquium series. Students will be expected to attend colloquia as active members of the minor. As advanced graduate students they will formalize their participation in one semester by registering for 2 credits, attending regularly, and presenting their own research (either an advanced seminar paper, an article prepared for publication, or the forerunner of the dissertation proposal).

Ph.D. Minor in Creative Writing

Three courses, to be chosen from W511 (Writing Fiction), W513 (Writing Poetry), W550 (Teaching Creative Writing in the Community), W615 (Writing Creative Nonfiction), W664 (Topics in Current Literature), and W680 (Theory and Craft of Writing). Students who want to pursue this minor must submit to the Creative Writing Director a brief personal statement outlining your wish to pursue this minor and a writing sample (10 poems for poets and 25 pages for fiction writers).

Ph.D. Minor in English and Germanic Philology

Four courses, to include G601 Old English and at least one of the other older Germanic languages; i.e., German G632 Gothic, G635 Old Icelandic, G638 Old High German, G639 Old Saxon, and G640 Middle High German. The remaining courses may be chosen from English G602 Middle English, G655 History of the English Language, L710 Beowulf, L711 Old English Literature; German G532 History of the German Language, and G625 Colloquium in Germanic Linguistics (when the topic is appropriate), G640 Reading Middle High German, G636 Old Icelandic Literature, G835 Seminar in Germanic Linguistics (when the topic is appropriate), and any of the remaining older Germanic languages listed above.

Ph.D. Minor in Feminist Critical Studies

The Minor in Feminist Critical Studies emphasizes feminist criticism and theory. It requires four courses (at least 15 hours of credit), including English L663 Introduction

to Feminist Critical Studies and at least one course outside the Department of English; each course must be passed with a grade of B+ (3.3) or higher. Relevant courses include English L605, L700, L707, and L773; Fine Arts A474 and A674; Cultural Studies C601 and C602; Communication and Culture C551 and C604; and Telecommunications T651. Students should consult with the minor advisor in the English department about specific courses of study.

Ph.D. Minor in Literacy Studies

Jointly administered by the Department of English and the School of Education, the minor requires a minimum of four courses, including English L502, Education L630, and two courses selected from an approved list, at least one of which must be outside the English department. For School of Education students, three of the four courses must be outside the student's major area. Students should confer with one of the advisors of the Literacy Studies minor; their names can be obtained from the director of graduate studies.

Ph.D. Minor in Literary Theory

Jointly administered by the Departments of English and Comparative Literature, the minor requires a minimum of three courses, including at least one selected from Comparative Literature C503, C504, C601, or C602; and one from English G660, L605, L607, L608, or L707. Other courses approved for the minor are French and Italian F584 and G560; Germanic Studies G800; Slavic Languages and Literatures R521; Spanish and Portuguese S473 and S512; and Theatre and Drama T555 and T556. Courses other than those listed previously may also be acceptable toward completion of the requirement; written consent to count such courses must be obtained in advance from the graduate advisor in the Department of English or Comparative Literature.

Ph.D. Minor in Literature and Science

The literature and science minor consists of four courses. Two of the four will be Department of English courses from the area of literature and science. One of those English courses will be L769 Literature and Science, the "core" course for the minor. The non-English department courses will come from a relevant science, from the Department of History and Philosophy of Science, or from some other relevant (nonliterary) discipline. The minor will be administered by the director of graduate studies in English, in consultation with the literature and science faculty as necessary.

Graduate Area Certificate in English and Germanic Philology

Also offered is a certificate in English and Germanic philology, requiring four courses in addition to the four required for the minor. These may include any of the courses listed previously, as well as courses in other departments (e.g., linguistics, folklore, classical studies, and anthropology) that are relevant to the history and prehistory of the Germanic languages, and to early Germanic literature and culture. For information about relevant courses, see the graduate advisor in the Department of English.

Faculty

Chairperson

Professor Jonathan Elmer*

Associate Chairperson

Kathy O. Smith

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Philip Appleman* (Emeritus), Susan D. Gubar* (Emerita), James Justus* (Emeritus), Terence Martin* (Emeritus), Scott R. Sanders* (Emeritus)

Chancellor's Professors

Judith H. Anderson*, Anthony Ardizzone*, Robert Fulk*, James Naremore* (Emeritus)

Rudy Professor/COAS Distinguished Professor

Patrick Brantlinger* (Emeritus)

Tarkington Chair of American Literature

George Hutchinson*

Culbertson Chair of Writing

John Schilb*

Ruth N. Halls Professors

Paul John Eakin* (Emeritus), Karma Lochrie*

Professors

Anthony V. Ardizzone*, George Barnett (Emeritus), Frederick Beaty* (Emeritus), Ernest Bernhardt-Kabisch* (Emeritus), Catherine Bowman*, Patrick Brantlinger* (Emeritus), Mary Burgan (Emerita), Linda Anne Charnes*, Lawrence Clopper* (Emeritus), Don Cook* (Emeritus), Alfred David* (Emeritus), Jonathan E. Elmer*, Christine Rhoda Farris*, Mary Agnes Favret*, Charles Forker* (Emeritus), Robert Dennis Fulk*, Mary Gaither* (Emerita), Donald Gray* (Emeritus), Kenneth R. R. Gros Louis* (Emeritus, Comparative Literature), Raymond W. Hedin*, George Bain Hutchinson*, Kenneth Johnston* (Emeritus), Eugene R. Kintgen* (Emeritus), M. Eugene Lawlis* (Emeritus), Peter Lindenbaum* (Emeritus), Karma D. Lochrie*, Christoph Lohmann* (Emeritus), Alyce L. Miller*, Andrew Horton Miller*, Lewis Miller* (Emeritus), Roger Mitchell* (Emeritus), Richard Nash*, David J. Nordloh* (Emeritus), Alvin H. Rosenfeld* (Jewish Studies), John Lincoln Schilb*, Murray Sperber* (Emeritus), Maura Frances Stanton*, Shane Vogel*, Stephen Myers Watt*, William Wiatt* (Emeritus), Paul Zietlow* (Emeritus), Malvin Zirker* (Emeritus)

Associate Professors

Michael P. Adams*, Dana Larson Anderson*, Purnima Bose*, Judith Christine Brown*, William Burgan* (Emeritus), Edward Paul Comentale*, Jennifer Fleissner*, Paul Charles Gutjahr*, T. Scott Herring*, Jeffrey F. Huntsman* (Emeritus), Patricia Clare Ingham*, Joshua Kates*, DeWitt Douglas Kilgore*, Ivan Kreilkamp*, Sheila

Lindenbaum (Emerita), Joan Pong Linton*, Maurice Manning*, Joss Marsh*, Michael Rosenblum* (Emeritus), Ranu Samantrai*, Lee W. Sterrenburg (Emeritus), Samrat Upadhyay, Nicholas Mark Williams*, John Woodcock* (Emeritus)

Assistant Professors

Penelope Anderson, Denise Cruz, Ross Gay, Shannon Gayk,Tarez Graban, D. Rae Greiner, Ellen Mackay*, Jesse Molesworth

Adjunct Professors

Oscar Kenshur* (Emeritus, Comparative Literature), Barbara Klinger* (Communication and Culture), John McCluskey Jr.* (Emeritus, African American and African Diaspora Studies), Dror Wahrman* (History)

Adjunct Associate Professors

Herbert Marks* (Comparative Literature), Melvin Plotinsky* (Emeritus)

Director of Graduate Studies

Associate Professor Patricia Ingham*, Ballantine Hall 442D, (812) 855-1543

Courses

500 Level

ENG–G 500 Introduction to the English Language (4 cr.) An introduction to the English language: its nature, structure, and development.

ENG–L 500 Introduction to Graduate Study for International Students (4 cr.) The methods and assumptions of graduate study in English and American literature, with special emphasis on classroom participation, the preparation and delivery of reports, and the writing of critical essays based on individual research. Admission must be approved by the departmental advisor for international students.

ENG–L 501 Professional Scholarship in Literature (4 cr.) Materials, tools, and methods of research.

ENG–L 502 Contexts for the Study of Writing (2–4 cr.) Historical and cognitive effects of writing, reading, and language use, and the implication of these effects for the teaching and study of literature and writing.

ENG–L 503 Teaching of Literature in College (2–4 cr.) Classroom teaching of literature in the light of current approaches.

ENG–L 504 Practicum on Research Techniques (2–4 cr.) Introduction to a range of general and specialized methods for advanced research in literary and cultural studies. Topics include methods for research in the History of the Book, codicology, digital research environments, etc.

ENG–L 505 Teaching Children's Literature at the Post-Secondary Level (2 cr.) Classroom teaching of children's literature in the light of current approaches.

ENG–L 506 Introduction to Methods of Criticism and Research (4 cr.) The conditions and assumptions of studying English, with emphasis on criticism and research on a culturally and historically diverse range of texts.

ENG–L 507 English Outside the Academy (4 cr.) Primarily for Special Field M.A. candidates. Explores discourses and domains of thought and language use that link the academy with areas of expertise outside it, including law, publishing, the media, advertising, health, and counseling.

ENG–L 508 Practicum on Teaching Literature in College (2–4 cr.) Topics include syllabus construction, lecture and discussion techniques, use and evaluation of written work.

ENG–L 509 Practicum on Critical Writing (2–4 cr.) A practice-based course on the historical and current grounds and techniques of critical writing in the academy. Topics include issues of rhetoric and idiom, the problem of voice in scholarly writing, the genres of academic prose, and the publication of academic work.

ENG–L 512 Practicum on Theoretical Bases for Advanced Research in Literary and Cultural Studies (2–4 cr.) A practice-based class in the identification and manipulation of the theoretical assumptions and motivations of contemporary criticism.

ENG–L 553 Studies in Literature (1–3 cr.) Primarily for secondary-school and junior-college teachers of English. Emphasis on thematic, analytic, and generic study.

ENG–L 599 Internship in English (1–4 cr.) Primarily for Special Field M.A. candidates. Students will define a project and secure both a faculty and an external sponsor. Likely external sponsors will include the IU Foundation, the IU Press, advertising agencies, charities, legal or political offices, health agencies, and writing centers. Number of credit hours depends on length of commitment.

ENG–W 500 Teaching Composition: Issues and Approaches (4 cr.) Consideration of fundamental issues in the teaching of writing and the major approaches to composition instruction. Specific topics include teaching invention and revision, diagnosing errors, teaching style and organization, making assignments, and evaluating student writing.

ENG–W 501 Practicum on the Teaching of Composition in College (1–3 cr.) Practical teaching of composition; current theories and policies. May be offered as a practicum for new instructors of regular and basic sections of W131 or as a practicum for those teaching the non-native sections.

ENG–W 511 Writing Fiction (4 cr.) Either W511 or W513 may count once for the M.A. or M.F.A., but not toward specified course requirements for the Ph.D.

ENG–W 513 Writing Poetry (4 cr.) Either W511 or W513 may count once for the M.A. or M.F.A., but not toward specified course requirements for the Ph.D.

ENG–W 553 Theory and Practice of Exposition (1–3 cr.) Primarily for secondary-school and junior-college teachers of English.

ENG–W 554 Practicum on the Teaching Creative Writing (2 cr.) Theory and practice of teaching the writing of poetry and fiction at the college level, with attention to matters of curricular design and classroom technique. Required of those teaching W103 for the first time. Open

also to graduate students not in the creative writing program.

600 Level

ENG–G 601 Medieval Languages (4 cr.) Introductory language instruction in the vernacular medieval languages of the British Isles. Course may cover Old English, Middle English, Old Irish, or Middle Welsh.

ENG–G 602 Readings in Language, History, and Culture (4 cr.) Consideration of the structure, use, and attitudes toward English in relationship to relevant historical or cultural contexts. Course topics may include the structural development of English, social or regional varieties of English, stylistics, usage controversies, language in history, lexicography.

ENG–G 603 Celtic Languages and Literature (4 cr.) P: G500 or its equivalent. Introduction to such languages as Old Irish and Welsh, or literatures in these languages. Topic varies.

ENG–G 651 American English (4 cr.) Growth and development of the English language in America from the first settlements to the present; dialectal diversity of American English.

ENG–G 655 History of the English Language (4 cr.) A survey of the evolution of the English language from its earliest stages to the present, with reference to its external history and to its phonology, morphology, syntax, and vocabulary.

ENG–G 660 Stylistics (4 cr.) Survey of traditional and linguistic approaches to the study of prose and poetic style. Attention will center on the description of the verbal characteristics of texts, what those characteristics reflect about the author, and how they affect the reader.

ENG–L 605 Critical and Interpretive Theory (4 cr.) Introduction to one or more major modes of contemporary criticism or critical theory.

ENG–L 607 History of Literary Criticism to the Enlightenment (4 cr.) A survey of the history of literary criticism and theory from Plato and Aristotle to the Enlightenment, including works by Greco-Roman, medieval, and Renaissance figures.

ENG–L 608 History of Literary Criticism from 1750 to 1960 (4 cr.) A survey of the history of literary criticism and theory from the late Enlightenment or early Romantic periods to 1960, including a variety of modern literary critics and theorists.

ENG–L 609 Readings in Early Medieval Literature and Culture (4 cr.) Variable topics in the cultures and literatures of post-conquest Britain (11th through the 13th centuries) including Anglo-Norman, Latin, early Middle English, and related writings.

ENG–L 610 Readings in Late Medieval Literature and Culture (4 cr.) Variable topics in the cultures and literatures of the fourteenth and fifteenth centuries. May include poetry, drama, prose, performance and non-literary texts.

ENG–L 611 Readings in Early Modern English Literature and Culture, 1500–1660 (4 cr.) Variable topics in the cultures and literatures of the sixteenth and seventeenth centuries. May include poetry, drama, prose, performance, and non-literary texts.

ENG–L 612 Chaucer (4 cr.) Critical analysis of The Canterbury Tales, Troilus and Criseyde, and selected shorter poems.

ENG–L 613 Middle English Literature (4 cr.) P: L612 or G602 or equivalent.

ENG–L 615 Readings in Poetry and Poetics, to 1800 (4 cr.) Extensive reading in the theories and practices of early English poetry. May survey the development of poetics or study a singular mode, genre, or school.

ENG–L 616 English Drama to the 1590s, Exclusive of Shakespeare (4 cr.)

ENG–L 617 Readings in Poetry and Poetics, from 1790 to the Present (4 cr.) A study of styles, techniques, forms, and conceptions of poetry.

ENG–L 621 English Literature 1500–1660 (4 cr.) Extensive reading in non-dramatic literature.

ENG–L 622 Spenser and Milton (4 cr.) Critical analysis of the major texts.

ENG–L 623 English Drama from the 1590s to 1800, Exclusive of Shakespeare (4 cr.) P: Familiarity with half a dozen plays of Shakespeare.

ENG–L 625 Readings in Shakespeare (4 cr.) Critical analysis of selected texts.

ENG–L 626 Readings in Restoration and Eighteenth Century Literature and Culture in England (4 cr.) Selected readings of text written in English from the Restoration to the U.S. Constitution. May include all genres and relevant secondary works.

ENG–L 627 Readings in Nineteenth-century British Literature and Culture, 1790-1900 (4 cr.) Selected readings of nineteenth-century British texts both literary and non-literary.

ENG–L 628 Readings in Narrative Literature to 1800 (4 cr.) Selected readings of narrative texts composed before 1800, with an emphasis on prose fiction.

ENG–L 629 Readings in Narrative Literature, from 1800 (4 cr.) Selected readings of narrative texts composed since 1800, with an emphasis on prose fiction.

ENG–L 631 English Literature 1660–1790 (4 cr.) Extensive reading in poetry and nonfictional prose.

ENG–L 632 Readings in 19th century American Literature and Culture (4 cr.) Study of American Literature and culture from 1800–1900.

ENG–L 634 Readings in 20th- and 21st-century American Literature and Culture (4 cr.) Study of American Literature and Culture from 1900 to the present.

ENG–L 635 Readings in American Ethnic Literature and Culture (4 cr.) In-depth comparative study of African-American, Asian American, Latino/a, Chicano/a, Native American, and/or other American ethnic literature and culture.

ENG–L 636 Readings in Drama and Performance, to 1800 (4 cr.) Historical and critical study of dramatic literature and performance through 1800.

ENG–L 637 Readings in Drama and Performance, 1800 to the present (4 cr.) Historical and critical study of modern dramatic literature and performance (British, Irish, American, and/or other English language drama).

ENG–L 638 Readings in Contemporary Literature (4 cr.) Readings in late-20th and early 21st-century literature and its historical, cultural, and theoretical contexts.

ENG–L 639 English Fiction to 1800 (4 cr.)

ENG–L 640 Readings in Transatlantic Literature (4 cr.) Study of Literature on both sides of the Atlantic.

ENG–L 641 English Literature 1790–1900 (4 cr.) Extensive reading in poetry and nonfictional prose.

ENG–L 643 Readings in Colonial and Postcolonial Literatures (4 cr.) Study of literatures within the historical, cultural, and political context of European colonialism and anti- or post-colonial resistance.

ENG–L 644 Readings in Performance Studies (4 cr.) Introduction to major works, methods, issues, and developments in performance theory and criticism.

ENG–L 645 English Fiction 1800–1900 (4 cr.)

ENG–L 646 Readings in Media, Literature, and Culture (4 cr.) Introductory study of issues in literary editing, textual cultures, or digital humanities.

ENG–L 648 Readings in Comparative Ethnic and Postcolonial Studies (4 cr.) Introduction to the major works, methods, issues, and developments in comparative ethnic and postcolonial cultural studies.

ENG–L 649 British Literature since 1900 (4 cr.) Extensive reading in all genres.

ENG–L 651 American Literature 1609–1800 (4 cr.) Intensive historical and critical study of all genres from John Smith through Charles Brockden Brown.

ENG–L 652 Readings in 20th and 21st century British Literature and Culture (4 cr.) Study of British Literature from 1900 to the Present.

ENG–L 653 American Literature 1800–1900 (4 cr.) Intensive historical and critical study of all genres from Washington Irving through Frank Norris.

ENG–L 655 American Literature and Culture 1900–1945 (4 cr.) Study of American literature and culture from the turn of the century to 1945.

ENG–L 656 American Literature and Culture 1945 to the Present (4 cr.) Studies in American literature and culture from 1945 to the present.

ENG–L 657 Readings in Literature and Critical Theory (4 cr.) Study of major movements, figures, or topics in literary and/or critical theory.

ENG–L 663 Readings in Feminist, Gender, and Sexuality Studies (4 cr.) An introduction to and examination of major works, methods, issues, and developments.

ENG–L 666 Survey of Children's Literature (4 cr.) Survey of literature written for children and adolescents from the medieval period to the present.

ENG–L 671 Modern British and Irish Drama (4 cr.)

ENG–L 672 Modern American Drama (4 cr.)

ENG–L 673 Studies in Women and Literature (4 cr.) Women's literary accomplishments and representations of women in English from the sixteenth century to the present.

ENG–L 674 Studies in International English Literature (4 cr.) Literatures from Africa, the Caribbean, Australia, New Zealand, the Pacific islands, the Indian subcontinent, or Canada.

ENG–L 680 Special Topics in Literary Study and Theory (4 cr.) Readings in sociological, political, psychological, and other approaches to literature.

ENG–L 695 Individual Readings in English (1–4 cr.)

ENG–L 699 M.A. Thesis (arr. cr.)

ENG–W 601 Development of Rhetoric and Composition (4 cr.) Traces the development of rhetorical theory from Plato through the Renaissance and up to the present; puts special emphasis on exploring how present-day composition programs and practices reflect the past.

ENG–W 602 Contemporary Theories in Rhetoric and Composition (4 cr.) An introduction to current research in rhetoric and composition. Draws on insights from linguistic theory, cognitive theory, and rhetorical theory to develop greater understanding of the writing process and build pedagogical applications.

ENG–W 609 Directed Writing Projects (1–4 cr.)

ENG–W 610 Indiana Writing Workshop (2 cr.) P: Acceptance to the Indiana Writers' Conference held in June of each year. Intensive training in various forms of writing at the conference; submission of significant body of writing before the end of the last summer session.

ENG–W 611-612 Writing Fiction I-II (4–4 cr.)

ENG–W 613-614 Writing Poetry I-II (4–4 cr.)

ENG–W 615 Writing Creative Nonfiction (4 cr.) Writing workshop in such modes as personal essay, autobiography, and documentary. Open also to graduate students not in the creative writing program.

ENG–W 664 Topics in Current Literature (4 cr.) The study of recent poetry and prose, emphasizing special formal, technical, and intellectual concerns of author and work. Open also to graduate students not in the creative writing program.

ENG–W 680 Theory and Craft of Writing (4 cr.) Elements of poetic prosody or the major fictive techniques or both: nature of stress, concepts of meter, nature of rhythm, prosodic use of syntax, theories of fictive realism, nature of fictive romance, point of view, etc. Students will do some writing. Open also to graduate students not in the creative writing program.

ENG–W 697 Independent Study in Writing (1–4 cr.) P: two semesters of W611, W612, W613 or W614.

ENG–W 699 M.F.A. Thesis (arr. cr.)

700 Level

ENG–G 780 Special Studies in English Language (4 cr.) P: G500 or equivalent.

ENG–L 700 Topics in Feminist Critical Studies (4 cr.) Readings in feminist theories of representation, gender, sexuality, the institution, or other areas of feminist critical endeavor.

ENG–L 701 Descriptive Bibliography and Textual Problems (4 cr.)

ENG–L 705 Problems in Composition, Literacy, and Culture (4 cr.)

ENG–L 707 Studies in Literary Theory and Criticism (4 cr.)

ENG–L 710 Beowulf (4 cr.) P: G601. Critical reading of the text of the poem, with consideration of its relationship to other writings in Old English and the heroic tradition in literature.

ENG–L 711 Old English Literature (4 cr.) P: G601 or equivalent.

ENG–L 712 Chaucer (4 cr.) P: L612 or L613 or equivalent.

ENG–L 713 Middle English Literature (4 cr.) P: L612 or L613 or equivalent.

ENG–L 715 English and Scottish Popular Ballads (4 cr.) Student investigation of principal problems met in ballad scholarship. Special attention to textual relationships, dissemination, and unique qualities of genre.

ENG–L 721 Spenser (4 cr.)

ENG–L 723 Elizabethan and Jacobean Drama (4 cr.)

ENG–L 725 Shakespeare (4 cr.)

ENG–L 730 Renaissance Poetry and Prose (4 cr.)

ENG–L 731 Milton (4 cr.)

ENG–L 733 Restoration and Augustan Literature (4 cr.)

ENG–L 736 Age of Johnson (4 cr.)

ENG–L 738 Research in Literary Histories and Theories of History (4 cr.) Issues and methods in literary histories and historiography. Direct research can include a range of specific topics and historical periods.

ENG–L 739 English Fiction to 1800 (4 cr.)

ENG–L 740 Research in Aesthetics, Genre, and Form (4 cr.) Analysis of literary and cultural aesthetics, literary form, and /or genre. Includes directed research on relevant issues across a range of historical periods.

ENG–L 741 Romantic Literature (4 cr.)

ENG–L 742 Research in Structure, History and Use of English and Related Languages (4 cr.) Research in all aspects of English Language Studies, including comparative philology of early Germanic languages, literary stylistics, lexicography, social and regional variation, usage and language attributes.

ENG–L 743 Victorian Literature (4 cr.)

ENG–L 744 Research in Drama and Performance (4 cr.) Selected topics in the study of dramatic literature, theater studies, and performance studies.

ENG–L 745 English Fiction 1800-1900 (4 cr.)

ENG–L 746 Research in Textual and Media Studies (4 cr.) Training and research in descriptive and analytical bibliography, textual theory and criticism, textual editing, or text technology and media theory/media studies.

ENG–L 748 Research in Colonial and Postcolonial Studies (4 cr.) Issues and methods in colonial and postcolonial literary and cultural studies, including directed research on relevant topics from a range of historical periods.

ENG–L 749 Twentieth-Century British Literature (4 cr.)

ENG–L 750 Research in Race and Ethnicities (4 cr.) Issues and methods in research on race and ethnicities and literary and critical studies, including directed research on relevant topics from a range of historical periods.

ENG–L 751 Major American Writers 1700–1855 (4 cr.) Two or three writers. Techniques and thematic comparisons.

ENG–L 752 Research in Gender and Sexuality (4 cr.) Issues and methods in gender and sexuality and literary and cultural studies, including directed research on relevant topics from a range of historical periods.

ENG–L 753 Major American Writers 1855 to the Present (4 cr.) Two or three writers. Techniques and thematic comparisons.

ENG–L 754 Research in Literary Geographies (4 cr.) Intensive study of literature in relation to space and geography. Topics might include relations between political and aesthetic conceptions of space, literary forms across space and time, or notions of national, transnational, transatlantic, hemispheric, and global space as they impact cultural expression.

ENG–L 756 Research in Rhetorical Studies (4 cr.) Advanced research in rhetoric. Draws on insights from linguistic, cognitive, and rhetorical theories.

ENG–L 758 Research in Interdisciplinary Studies (4 cr.) Social, political, and psychological studies in literature written in English.

ENG–L 760 Research in Specific Author(s) or Work(s) (4 cr.) Critical reading and research into a single text or author, or a closely related group of texts or authors.

ENG–L 761 American Poetry (4 cr.)

ENG–L 762 Research in Composition, Literacy, and Culture (4 cr.) Advanced study of selected topics in the history of writing practices, with attention to how culture influences theories of rhetoric and literacy.

ENG–L 764 Research in Literature and Critical Theory (4 cr.)

ENG–L 766 Children's Literature (4 cr.) Issues in the critical and historical study of literature for children or young adults.

ENG–L 769 Research in Literature and Science (4 cr.) Major developments in modern science, the philosophical

issues they raise, and their influence on modern thought and literature.

ENG–L 773 Topics in Feminist Literary History (4 cr.) Feminist critical research on literary texts in cultural contexts; or focusing on a particular historical period, theme, genre, or author.

ENG–L 774 Topics in International English Literature (4 cr.) Topics in English literature from Africa, the Caribbean, Australia, New Zealand, the Pacific Islands, the Indian subcontinent, or Canada.

ENG–L 775 Studies in Modern Drama (4 cr.)

ENG–L 776 Comparative Drama (4 cr.) Selected topics in comedy or tragedy.

ENG–L 779 Literature and Society (4 cr.) Analysis of representative works of different periods to illustrate the study of literature in relation to its age, or as a social product. Consideration of economic, political, class, and other cultural influences.

ENG–L 780 Special Studies in English and American Literature (4 cr.)

ENG–L 790 Independent Study (arr. cr.) Consent of the instructor required. Open to Ph.D. candidates in English only.

ENG–L 799 Ph.D. Thesis (arr. cr.)

ENG–W 780 Special Studies in Composition (4 cr.)

ENG–W 795 Dissertation Prospectus Workshop (2 cr.) Provides models of successful prospectuses and guidance in the actual writing of prospectuses.

Environmental Programs

School of Public and Environmental Affairs

Departmental E-mail: speainfo@indiana.edu

Note: Be sure to specify which program you are interested in when sending mail.

Departmental URL: www.indiana.edu/~speaweb

Curriculum

Program Information

The environmental programs described below are cooperative undertakings of the School of Public and Environmental Affairs (SPEA), the College of Arts and Sciences, and the University Graduate School. They are administered by SPEA or the University Graduate School or both and provide courses and degree programs for students not only in SPEA, but across the university.

Degrees Offered

Dual master's degrees in environmental science (M.S.E.S.) and ecology/evolutionary biology (M.A.), dual master's degrees in environmental science (M.S.E.S.) and geological sciences (M.S.), dual master's degrees in environmental science (M.S.E.S.) and geography (M.A.) (all three dual degrees are offered jointly with SPEA), and the Doctor of Philosophy in environmental science. In addition, SPEA offers the Master of Science in Environmental Science (M.S.E.S.), the Master of Public Affairs (M.P.A.) with a concentration in environmental policy and natural resources management, a combined M.S.E.S./M.P.A. degree, a combined M.S.E.S. and Doctor of Jurisprudence, and a combined M.P.A. and Doctor of Jurisprudence. The latter two combined degrees are offered jointly with the School of Law.
For information regarding ecology and evolutionary biology, geography, and geological sciences, consult the respective department listings elsewhere in this bulletin; for information regarding the degrees offered exclusively or jointly by the School of Public and Environmental Affairs and the School of Law, see their respective bulletins or call (812) 855-2840.

Dual Master Degrees

The student must apply to and be accepted by both the School of Public and Environmental Affairs and either the program in ecology and evolutionary biology of the Department of Biology, the Department of Geography, or the Department of Geological Sciences.

Requirements

A total of 60 credit hours that qualify the student for two master's degrees. For specific program requirements, see the departmental listings in this bulletin and the School of Public and Environmental Affairs Graduate Programs Bulletin.

Doctor of Philosophy Degree

The doctoral program is administered by the School of Public and Environmental Affairs in cooperation with the biology, chemistry, geography, and geological sciences departments. The Ph.D. in environmental science is awarded by the University Graduate School.
The program provides a rigorous, comprehensive education in environmental science. The specific objectives of the program are: (1) to conduct advanced research and scientific analysis of environmental events, issues, and problems; (2) to further understanding of the nature and management of natural and human environments; and (3) to provide an opportunity for students and faculty members in several departments to engage in collaborative environmental research in an interdisciplinary mode.

Admission

A student must apply to the School of Public and Environmental Affairs for doctoral studies; those accepted will be recommended to the University Graduate School for formal admission into the Ph.D. program. Applicants to this program must have completed at least a bachelor's degree in science, mathematics, engineering, or a related field. Prospective students are required to submit (1) a statement of purpose, which should be as specific as possible and, preferably, should refer to potential research mentors by name; (2) official results of the Graduate Record Examinations (GRE); (3) official transcripts of all undergraduate and graduate course work completed; and (4) three letters of recommendation. Applicants whose native language is not English must also submit results of the Test of English as a Foreign Language (TOEFL).

Degree Requirements

The degree requires: (1) substantial knowledge in a primary environmental science concentration; (2) breadth in related environmental science and policy; (3) an understanding of research methods; (4) an in-depth knowledge of the dissertation topic; and (5) a dissertation

that demonstrates the student's ability to analyze, explain, and interpret research clearly and effectively.

Advisory Committee

During the first semester of enrollment, each student must organize an advisory committee. Normally this committee consists of at least four faculty members: at least two should be from the School of Public and Environmental Affairs; the others may be from other departments or from outside the university. Membership of the advisory committee is approved by the director of the Doctoral Program in Environmental Science and the dean of the University Graduate School. At least three members of the advisory committee must be members of the graduate faculty.

Fields of Study

Each student should define a principal field of study which may be interdisciplinary. The student should prepare a proposal outlining a program of course work that the student believes lies within that field.

Each student should prepare a program of course work that fulfills the requirement of breadth in environmental science and policy. The breadth requirement may be fulfilled by using a wide spectrum of environmentally related courses, including areas such as economics, law, and management, in addition to other science courses. Each student is also required to prepare a statement of courses or activities for meeting the research methods requirement. Normally these include subjects such as computer science, geographic information systems, remote sensing, statistics, and mathematical modeling, although other technical skill areas such as electronics and analytical chemical techniques may be appropriate for some students.

Narrative Statement

Each student must prepare a narrative statement that includes a discussion of the student's previous education experiences, a statement of career objectives, a statement of research interests, and a proposed program of course work.

Each student must submit the narrative statement to the advisory committee for approval, usually during the first semester in the program.

Course Requirements

The exact nature and amount of course work in each of three areas—principal field of study, breadth in environmental science and policy, and research methods—is determined by the advisory committee after review and approval of the student's proposed plan of study in each of these areas. Selection of specific courses is based on obtaining (1) adequate knowledge for qualifying examinations, (2) appropriate preparation for a research project, and (3) a mixture of courses that meet the individual professional goals of the student.

The Ph.D. requires the completion of at least 90 credit hours in advanced study and research beyond the bachelor's degree. A student must complete a minimum of 30 credit hours of advanced course work in environmental science and policy. Students must also complete a minimum of 30 credit hours of research, normally taken as SPEA-E 625 or SPEA-E 890. The student, with approval of the advisory committee, should complete some combination of additional course work and research sufficient to meet the 90 credit hour requirement.

Each student is required to enroll in SPEA-E 680 Seminar in Environmental Science and Policy (1 credit hour/semester) for four semesters during the course of their degree program. Students enrolled in SPEA-E 680 may either make a formal presentation or write a brief synopsis and critique of four presentations attended each semester. Students are encouraged to enroll in SPEA-E 710 Advanced Topics in Environmental Science, which may be taken multiple times, as the topics vary. Advanced topics courses and reading courses may be used to meet requirements, depending upon the topic and the student's area of interest.

Students should note that all 30 credit hours of advanced course work, if properly selected, and 6 credit hours of research, may be applied toward the Master of Science in Environmental Science (M.S.E.S.) degree. With an additional 12 credit hours of approved course work, a student may be awarded the M.S.E.S. degree while completing the requirements for the Ph.D. degree in environmental science. Completion of the M.S.E.S. degree as part of this doctoral program is not a requirement; however, this option may be appropriate for some students.

Qualifying Examinations

Before a student is admitted to candidacy, all requirements determined by the advisory committee must be met and the qualifying examinations passed. A student who fails qualifying examinations may retake them only once.
The decision to admit a student to doctoral candidacy is made by the advisory committee, which evaluates the student's performance in the written examination, research proposal, and oral examination.

Written Examination

This examination should be taken by the end of the student's fifth semester in the Ph.D. program. The exam focuses on topics covered by the student's course work and related to the student's research interests. The examination is written and graded by the student's advisory committee. The written examination is graded as pass, conditional pass, or fail.

Research Proposal

No later than the end of the fifth semester, the student should submit a written research proposal for review by the advisory committee. The proposal should be documented, clearly stating a research objective, the approach to be taken, and the significance of the work.

Oral Examination

Each candidate is examined orally by the advisory committee. The oral examination expands upon the written examination and covers the student's research proposal.

Research Committee

Upon the student's successful completion of the qualifying examinations, a research committee is formed. Normally this committee consists of at least four faculty members: at least two should be from the School of Public and

Environmental Affairs; the others may be from other departments. The director of the Doctoral Program in Environmental Science recommends the student's research committee to the dean of the University Graduate School. At least three members of the research committee must be full members of the graduate faculty.

Students are required to submit an annual report (1-2 pages) of their progress to be approved by their advisory or research committee during an annual review meeting arranged by the student and their primary advisor by April 15 each year. This report should contain the following: provisional thesis title, nomination of advisory or research committee (date completed), course work completed (projected date; date completed), qualifying exam (projected date; date completed), brief outline of research objectives, detailed summary of progress and relevant activities, summary of research plans for the next year, and proposed long-term research plans and timetable.

Dissertation

A dissertation is required and must be of sufficient value to warrant publication. The dissertation must represent a substantial research effort, both in quality and quantity. The dissertation requirement may be met by preparing a traditional dissertation or by preparing a portfolio of research documents including publications, manuscripts in press, and a completed manuscript suitable for submission to a journal. These documents may have multiple authors, although the doctoral candidate must demonstrate that he or she made significant contributions to at least two of the publications or manuscripts submitted for review. The research portfolio must have introductory and concluding chapters to integrate across the topics. The research portfolio also must be prepared to meet the University Graduate School's requirements for dissertations. A public presentation of the dissertation research is required. The dissertation must be approved by the research committee.

Ph.D. Minor in Environmental Studies

(12 credit hours)

Students in Ph.D. programs at Indiana University may, with the consent of their advisory committee, choose environmental studies as an outside minor. The minor is flexible and is usually designed by students in accordance with their needs.

Requirements

1. The doctoral candidate must secure a faculty advisor in consultation with the director of the Doctoral Program in Environmental Science. The advisor may not be from the candidate's major department. The candidate's advisor serves as the representative in all examinations or other requirements of the candidate's Ph.D. program that relate to the minor. The advisor decides on the character of the examination, if any, in the minor field and certifies that the candidate has met the requirements of the minor.
2. The candidate must take at least 12 credit hours of graduate-level courses related to environmental studies. These courses must be from at least two different disciplines outside the candidate's major department. The choice of courses should be made in consultation with the candidate's advisor and must be approved by the director of the Doctoral Program in Environmental Science. Acceptance of the proposed minor is based on two criteria: (1) the courses must have a direct relationship to environmental studies, and (2) the courses must not normally be required as part of major or tool skill options in the student's major department. Courses in the minor program should be selected according to the student's interest. Students majoring in areas other than the natural sciences, for example, may wish to consider course offerings in the natural sciences; similarly, natural science students might consider course offerings in the social and behavioral sciences.
3. A minimum cumulative grade point average of 3.0 (B) must be attained in all courses used for the minor.

Faculty

Graduate Faculty

Unless otherwise noted in parentheses, the faculty member's primary affiliation is with the School of Public and Environmental Affairs.

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Arthur F. Bentley Professor

Elinor Ostrom* (Political Science)

Distinguished Professors

Gary Hieftje* (Chemistry), Ronald Hites* (Public and Environmental Affairs)

Professors

Matthew Auer*, Randall Baker* (Emeritus), Simon Brassell* (Geological Sciences), Sharon Brehem* (Psychology), Edward S. Brondizio* (Anthropology),Keith Clay* (Biology), Chris Craft*, Jeremy Dunning* (Geological Sciences), George Ewing* (Emeritus, Chemistry), Burnell C. Fischer* (Clinical), Robert L. Fischman* (Law), Hendrik Haitjema*, Daniel C. Knudsen* (Geography), Emilio Moran* (Anthropology), Lisa Pratt* (Geological Sciences), Sara Pryor* (Geography), J. C. Randolph*, Edwardo Rhodes (Emeritus)*, Scott Robeson* (Geography), Philip Stevens*, Jeffrey White*, Donald Whitehead* (Emeritus, Biology)

Associate Professors

David H. Good*, Diane Henshel*, Kerry Krutilla*, Vicki Meretsky*, Flynn Picardal*, Ingrid Ritchie* (I), Todd Royer, Catherine Tucker*, Chen Zhu* (Geological Sciences)

Assistant Professors

Michael Muehlenbein (Anthropology), Joseph Shaw

An (I) after a faculty member's name indicates that the person teaches at Indiana University–Purdue University Indianapolis.

Academic Advisor

Professor Hendrik Haitjema*, SPEA 443, (812) 855-4953

Doctoral Student Advisor

Professor Hendrik Haitjema*, SPEA 443, (812) 855-4953

Courses

For descriptions of courses offered by the School of Public and Environmental Affairs, see the School of Public and Environmental Affairs Graduate Programs Bulletin.

Ethnomusicology

College of Arts and Sciences

Departmental E-mail: burnim@indiana.edu

Departmental URL: www.indiana.edu/~folklore/ethno.shtml

Curriculum

Ph.D. Minor in Ethnomusicology

The Ethnomusicology Program offers an interdepartmental doctoral minor that enables students to take courses in ethnomusicology from several departments. Students wishing to enroll in the program must first consult with the program director. An advisor will be assigned to each student, taking into consideration the academic interests of each individual.

Graduate students may pursue a concentration in ethnomusicology at the M.A. and Ph.D. levels through the Department of Folklore and Ethnomusicology; consult the requirements for that department.

Course Requirements

Four approved courses, for a total of 12 credit hours, including two of the six core courses in ethnomusicology (Folklore E522, F523, E529, E714, F740, and F794) and two courses chosen from the others listed below. All courses must first be approved by the student's ethnomusicology advisor. With the consent of the advisor, courses other than those listed below may be chosen.

Grades

A minimum of a B (3.0) is required in each course that is to count toward the minor.

Examination

The student's advisor from the ethnomusicology faculty must be invited to participate in both the written and oral portions of the qualifying examination. The program director may, however, waive the written portion of the examination if the student's performance in the program has been of sufficiently high quality.

Master of Arts Track in Ethnomusicology

Course Requirements

A minimum of 30 credit hours including the ethnomusicology courses F501, E522, F523, E529, E714, and F794, and two additional approved courses, one of which must be in the Department of Folklore and Ethnomusicology.

Foreign Language Requirement

Reading proficiency in one modern foreign language. Must be completed before M.A. project/thesis is submitted.

Project/Thesis

Students may earn up to 6 credit hours for an M.A. project/thesis. A comprehensive oral examination is given when the project/thesis is submitted.

Ph.D. Track in Ethnomusicology

A total of 90 credit hours, at least 24 of which are the following specific ethnomusicology courses including F501, E522, F523, F528, E529, E714, F740, and F794. Four additional courses for the major, at least three of which must be in the department; three of these courses must be approved courses that fulfill one of the three tracks: Social and Cultural Theory (F722 is a required course), Preservation and Presentation (E522, F510, and F803 or an approved performance ensemble, which may include approved ensembles in the School of Music, are required), and World Area.
See section under Folklore and Ethnomusicology elsewhere in this bulletin for full Ph.D. requirements.

Faculty

Director

Professor Mellonee Burnim*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Mellonee Burnim*, Portia Maultsby* (African American and African Diaspora Studies, Music, Folklore and Ethnomusicology), Lewis Rowell* (Emeritus, Music), Ruth M. Stone* (Folklore and Ethnomusicology, Music)

Associate Professors

Judah Cohen*, Daniel B. Reed* (African Studies, Folklore and
Ethnomusicology)

Assistant Professors

Javier León, David Anthony McDonald

Senior Lecturer

Sue Tuohy (East Asian Languages and Cultures, Folklore)

Courses

FOLK–E 522 The Study of Ethnomusicology (3 cr.)

FOLK–E 529 Musical Cultures as Systems of Meaning (3 cr.)

FOLK–E 536 Applied Ethnomusicology and Folklore: Media Productions (3 cr.)

FOLK–E 601 Chinese Film and Music (3 cr.)

FOLK–E 607 Music in African Life (3 cr.)

FOLK–E 608 Music in African Film (3 cr.)

FOLK–E 639 Music & Nationalism in Latin America (3 cr.)

FOLK–E 688 Motown (3 cr.)

FOLK–E 694 Issues in African American Music (3 cr.)

FOLK–E 698 African American Religious Music (3 cr.)

FOLK–E 699 Theoretical Perspectives in African American Music (3 cr.)

FOLK–E 714 Paradigms of Ethnomusicology (3 cr.)

FOLK–F 501 Colloquy in Folklore/Ethnomusicology (3 cr.)

FOLK–F 510 Multimedia in Ethnomusicology (3 cr.)

FOLK–F 523 Fieldwork in Folklore/Ethnomusicology (3 cr.)

FOLK–F 527 Folk Poetry and Folksong (3 cr.)

FOLK–F 528 Advanced Fieldwork (3 cr.)

FOLK–F 532 Public Practice in Folklore and Ethnomusicology (3 cr.)

FOLK–F 600 Asian Folklore/Folk Music (3 cr.)

FOLK–F 609 African and Afro-American Folklore/Folk Music (3 cr.)

FOLK–F 617 Middle East Folklore/Folk Music (3 cr.)

FOLK–F 625 North American Folklore/Folk Music (3 cr.)

FOLK–F 634 Jewish Folklore and Ethnology (3 cr.)

FOLK–F 635 European Folklore/Folk Music (3 cr.)

FOLK–F 638 Latin American Folklore/Folk Music (3 cr.)

FOLK–F 640 Native American Folklore/Folk Music (3 cr.)

FOLK–F 651 Pacific Folklore/Folk Music (3 cr.)

FOLK–F 722 Colloquium in Theoretical Folklore/ Ethnomusicology (3 cr.)

FOLK–F 731 Archiving Principles and Bibliography in Folklore and Ethnomusicology (3 cr.)

FOLK–F 740 History of Ideas in Folklore/ Ethnomusicology (3 cr.)

FOLK–F 792 Traditional Musical Instruments (3 cr.)

FOLK–F 794 Transcription and Analysis in Folklore/ Ethnomusicology (3 cr.)

FOLK–F 800 Research in Folklore (arr.–9 cr.)

FOLK–F 803 Practicum in Folklore/Ethnomusicology (1–6 cr.)

FOLK–F 804 Special Topics in Folklore/ Ethnomusicology (1–3 cr.)

FOLK–G 599 Thesis Research (arr. cr.)

FOLK–G 901 Advanced Research (6 cr.)

FOLK–OS 500 Undistributed Overseas Study (arr. cr.)

Film Studies

College of Arts and Sciences

Departmental E-mail: mediast@indiana.edu

Departmental URL: www.indiana.edu/~cmcl/film/index.shtml

Curriculum

Degrees Offered

Students wishing to concentrate on film studies can pursue a Master of Arts and/or a Doctor of Philosophy degree in the Department of Communication and Culture. Specific topics in film studies are offered under media course titles each semester. Graduate students from other departments can also earn a Ph.D. minor in Communication and Culture with a focus on film. For more information, see degree requirements and the overview of media curriculum for graduate study under the listing for Communication and Culture.

Faculty

Director

Assistant Professor Ted Striphas*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professor

James Naremore* (Emeritus, Communication and Culture, Comparative Literature, English)

Professors

Barbara Klinger*, Gregory Waller* (Chair, Communication and Culture)

Associate Professors

Christopher Anderson*, Joan Hawkins*

Assistant Professors

Mary Gray*, Joshua Malitsky, Ted Striphas*

Adjunct Professors

Peter Bondanella* (Emeritus, Comparative Literature, French and Italian), Sumie Jones* (Emerita, Comparative Literature, East Asian Languages and Cultures), Darlene Sadlier* (Spanish and Portuguese)

Graduate Advisor

Associate Professor Jane Goodman*, Classroom Office Building, 800 E. 3rd Street, Bloomington, (812) 855-3232

Courses

Communication and Culture

C503 Introduction to Media Theory and Aesthetics (3 cr.)
C506 Methods of Media Research (3 cr.)
C552 Media Institutions and the Production of Culture (3 cr.)
C560 Motion Picture Production (3-4 cr.)
C561 Intermediate Motion Picture Production (4 cr.)
C562 The Screenplay (4 cr.)

C592 Media Genres (3 cr.)
C594 History of European and American Films II (4 cr.)
C596 National Cinemas (3 cr.)
C606 Media Criticism (3 cr.)
C610 Identity and Difference (3 cr.)
C620 Media, Culture, and Politics (3 cr.)
C652 Globalization of Media (3 cr.)
C691 Authorship in the Cinema (4 cr.)
C792 Film History and Theory (4 cr.)
C793 Seminar in Media Studies (3 cr.)

Comparative Literature

C692 Comedy in Film and Literature (4 cr.)
C693 Film Adaptations of Literature (4 cr.)
C790 Studies in Film and Literature (4-12 cr.)

East Asian Languages and Cultures

E533 Studies in Chinese Cinema (3 cr.)

English

L780 Special Studies in English and American Literature (4 cr.) Topics on film.

Italian

M455 Readings in the Italian Cinema (3 cr.) May be repeated once for credit.
M500 Seminar in Italian Cinema (3 cr.)

Telecommunications

R540 Special Projects in Telecommunications (cr. arr.)

Fine Arts

Gollege of Arts and Sciences
Studio Art Departmental E-mail: faoffice@indiana.edu

Art History Contact Information: www.indiana.edu/~arthist/contact.shtml

Fine Arts Departmental URL: www.fa.indiana.edu

Curriculum

Degrees Offered
Master of Arts (History of Art), Master of Arts for Teachers, Master of Fine Arts (Studio), and Doctor of Philosophy (History of Art)

Special School Requirements
(See also general University Graduate School requirements.)

Master's Degrees
Master of Arts Degree (History of Art)
Admission Requirements

Bachelor's degree with a major in the history of art or its equivalent. GPA of 3.0 expected. Appropriate level of achievement on the Graduate Record Examination (GRE) General Test. Three letters of recommendation. Writing sample.

Grades

A minimum grade point average of 3.5 must be maintained. Only those art history courses in which a B or higher has been earned will count towards the degree. A student who has a GPA of less than 3.5 may be placed on probation.
Course Requirements

A minimum of 30 credit hours. No fewer than three seminars in two areas; four lecture courses at the 400 and 500 levels in no fewer than three areas, at least two of which must be in Western art; the research sources course (A575).

Foreign Language Requirement

Reading proficiency in one language; usually German or French is selected. Proficiency must be demonstrated by the beginning of the third semester of study.

Essay

Required.

Master of Arts for Teachers Degree
Contact the department to receive approval to apply for the M.A.T.

Admission Requirements

Bachelor's degree with an undergraduate major GPA of 3.0; at least 24 credit hours in undergraduate fine arts courses; portfolio of work showing reasonable skill and creative ability. Students without certification must fulfill certification requirements as well as requirements for the M.A.T.
Course Requirements

A total of 36 graduate-level credit hours of which 20 credit hours must be in studio courses approved by student's advisor, and 6-9 credit hours in art history (in at least two areas). 7-11 credit hours may be taken outside of the department and may consist of up to 6 credit hours of undergraduate studio courses not listed in the Graduate Bulletin, with department and dean approval. Only those courses listed in this University Graduate School Bulletin have been approved for graduate credit.

Final Examination

Oral: review of studio work by the student's committee.

Residence

Many students attempt to complete this degree in summer sessions only. The department strongly recommends that at least one semester should be completed on the Bloomington campus during the regular academic year.

Dual Master of Arts and Master of Library Science Degrees
This program permits the student to coordinate a Master of Arts degree in fine arts (history of art major) with a Master of Library Science degree. The dual program requires the completion of 60 credit hours as opposed to the 70 credit hours that would have to be taken if the degrees were pursued independently.

Admission Requirements

Students must apply for admission to both the School of Fine Arts and the School of Library and Information Science and meet the admissions requirements established by each.

Requirements

Thirty (30) credit hours in the School of Fine Arts, including A575, and no fewer than two seminars in two areas and four lecture courses at the 400 and 500 levels in no fewer than three areas, at least two of which must be in Western art. Thirty (30) credit hours are required in the School of Library and Information Science, including L503, L505, L507, L520, L524, L528, L596, L623, and L630, and at least one elective chosen from L526, L570, and L583.

Master of Fine Arts Degree (Studio)

Admission Requirements

A bachelor's degree with a fine arts major in studio courses or a B.A. in another field with substantial coursework in studio art. A portfolio of work (color slides or a CD of images – refer to area requirements) showing a high degree of skill and creativity. Fall admission only.

Grades

A grade point average of 3.0 (B) must be maintained.

Course Requirements

A total of 60 credit hours at the graduate level, with emphasis in one chosen area of studio work. Only those courses listed in this bulletin have been approved for graduate credit. The distribution of course work, including art history courses where appropriate, to be determined in consultation with the student's major advisor.

Thesis

An exhibition of a group of works of art in the chosen studio area preceded by an oral qualifying examination, which will be given at least one semester before the exhibition. The qualifying examinations are designed to test the ability of students to speak articulately about the ideas and directions of their work, their ability to express themselves clearly in analyzing other works of art, and their general knowledge of the history of art.

Periodic Review

Student's eligibility to continue in the M.F.A. program will be subject to a periodic review of their progress.

Residence

This degree requires a minimum residency of two to three academic years to be determined in consultation with the advising faculty. Summer residency will not be counted in the fulfillment of this requirement.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours including a core of four lecture courses and three seminars (28 credit hours) in the major field, 16 credit hours in an inside minor, 9-12 credit hours in a second minor. An additional 18 credit hours of art history courses and seminars, or in some cases courses from other departments, will be chosen in consultation with the student's major field advisor. Up to 16 credits may be taken as dissertation credit hours. The major fields are Ancient, Byzantine and Medieval, Renaissance and Baroque, Modern (Nineteenth Century to the Present), Islamic, Asian, and African/Oceanic/Pre-Columbian Art. A minimum of three seminars in the major field is required. The 16 credit hours for the inside minor must include a minimum of two seminars (600 level); reading courses and studio courses do not satisfy the inside minor requirement. The second minor may be taken in another department, which defines its own requirements (usually 9-12 credit hours), or in the history of art (12 credit hours).

Areas

Ancient, Medieval, Renaissance/Baroque, Modern, Islamic, Asian, African/Oceanic/Pre-Columbian

Grades

A minimum grade point average of 3.5 is required in the major field and the departmental minor(s). Only those art history courses in which a B or higher has been earned will count towards the degree. A student who has a GPA of less than 3.5 may be placed on probation.

Foreign Language Requirement

Reading proficiency in two languages (usually French and German). An additional foreign language may be required by the major field advisor.

Qualifying Examination

Three written examinations in the major field; oral examination at discretion of department.

Final Examination

Oral, covering the dissertation.

Ph.D. Minor in Art History

A Ph.D. minor in art history is available to students outside the School of Fine Arts. Normally, it consists of a minimum of two graduate-level courses and one seminar in a single area (12 credit hours) or four graduate-level courses (16 credit hours). All programs must be determined in consultation with the art history graduate advisor. A grade point average of 3.5 is required.

Faculty

Director, Henry Radford Hope School of Fine Arts: Chair, Studio Art

Tim Mather

Chair Art History

Patrick McNaughton*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professor

Patrick McNaughton*

President's Outstanding Faculty Awardees

William Itter* (Emeritus), Bonnie Sklarski* (Emerita)

Rudy Professor

Robert Barnes* (Emeritus)

Ruth N. Halls Professors

Sarah Lea Burns*, Jeffrey A. Wolin*

Professors

Ed Bernstein*, Adelheid Gealt*, Janet E. Kennedy*, Randy Long*, Patrick McNaughton*, Jeffrey A. Wolin*

Associate Professors

Paul Brown, Wendy Calman*, Margaret Dolinsky, Michelle Facos*, Giles Knox, Arthur Liou, Eve Mansdorf, Tim Mather, Malcolm Mobutu-Smith, Osamu James Nakagawa, Rita Frances Newberry, James Reidhaar*, Diane Reilly*, Bret Rothstein*, Julie Van Voorhis*

Assistant Professors

Christyl Boger, Christiane Gruber, Nicole Jacquard, Martha Macleish, Althea Murphy-Price, Leslie Sharpe, Mariana Tres, Caleb Weintraub

Academic Specialist

Betsy Stirratt

Faculty Emeriti

Robert Barnes*, Bruce Cole*, Tom Coleman*, Shehira Davezac, Molly Faries*, Barry Gealt*, John Goodheart*, William M. Itter*, Jerald Jacquard*, W. E. Kleinbauer*, Marvin Lowe*, Susan Nelson*, Rudolph Pozzatti*, Bonnie Sklarski*, Joan Sterrenburg*

Adjunct Professors

James L. Franklin Jr.*, Eleanor W. Leach*

Adjunct Associate Professor

Claude Cookman

Adjunct Assistant Professors

Deborah Deliyannis*, Margaretha Kramer-Hajos, Diane Pelrine

Courses

Cross-Listed Courses

Art History

Ancient

FINA–A 410 Topics in Ancient Art (3–4 cr.) Three (3) credits for undergraduates.

FINA–A 411 The Art and Archaeology of Anatolia (4 cr.) Three (3) credits for undergraduates.

FINA–A 412 The Art and Archaeology of the Prehistoric Aegean (4 cr.) Three (3) credits for undergraduates.

FINA–A 413 The Art and Archaeology of Greece (4 cr.) Three (3) credits for undergraduates.

FINA–A 414 The Art and Archaeology of Rome (4 cr.) Three (3) credits for undergraduates.

FINA–A 416 Greek Architecture (4 cr.)

FINA–A 418 Roman Architecture (4 cr.)

FINA–A 513 Greek Vase Painting (4 cr.)

FINA–A 514 Greek Sculpture: Fifth Century (4 cr.)

FINA–A 516 Greek Sculpture: Hellenistic (4 cr.)

FINA–A 517 Early Italian and Etruscan Art (4 cr.)

FINA–A 518 Roman Sculpture (4 cr.) Critical analysis of historical reliefs, portraiture, and sarcophagi.

FINA–A 519 Roman Painting (4 cr.) Critical analysis of Roman painting from second century B.C. through early fourth century A.D.

FINA–A 611 Problems in Prehistoric Aegean Archaeology (4 cr.)

FINA–A 612 Problems in Greek Archaeology (4 cr.) Sources for the history of Greek art and civilization of various periods.

FINA–A 613 Problems in Greek Architecture (4 cr.)

FINA–A 614 Problems in Greek Sculpture (4 cr.)

FINA–A 615 Problems in Greek Painting (4 cr.)

FINA–A 616 Problems in Roman Art (4 cr.)

Medieval

FINA–A 421 Early Christian Art (4 cr.)

FINA–A 423 Romanesque Art (4 cr.)

FINA–A 424 Gothic Art (4 cr.)

FINA–A 425 Byzantine Art (4 cr.)

FINA–A 520 Topics in Medieval Art (4 cr.) Various topics offered in Medieval Art.

FINA–A 522 Early Medieval Painting (4 cr.) Survey of the major schools of monumental and miniature painting during the early medieval period.

FINA–A 523 Early Christian Architecture (4 cr.) Intensive investigation of secular and church architecture in the Mediterranean from the Tetrarchy to Iconoclasm in terms of its relationship to topography, urban development, functions, liturgical planning, and related types of monuments.

FINA–A 621 Problems in Early Christian Art (4 cr.) Selected topics in early Christian art.

FINA–A 622 Problems in Early Medieval Art (4 cr.) Selected topics in early medieval art.

FINA–A 623 Problems in Romanesque Art (4 cr.) Discussion of the major problems of eleventh- and twelfth-century sculpture; knowledge of French and one other foreign language necessary.

FINA–A 624 Problems in Early Gothic Art (4 cr.)

FINA–A 625 Problems in Late Gothic Art (4 cr.)

FINA–A 626 Problems in Byzantine Art (4 cr.)

Renaissance and Baroque

FINA–A 430 Trecento Italian Painting (4 cr.)

FINA–A 433 Seventeenth-Century Art in Rome (4 cr.)

FINA–A 436 Italian Art of the Fifteenth Century (4 cr.)

FINA–A 437 Early Netherlandish Painting (4 cr.)

FINA–A 476 History of the Print (4 cr.)

FINA–A 531 Fifteenth- and Sixteenth-Century Italian Architecture (4 cr.) Validity of concepts of High

Renaissance and Mannerism and their application to architecture.

FINA–A 532 Italian Art of the 16th Century (4 cr.) Investigates art in Italy during one of its most important centuries. Focus on the artists of central Italy, including such luminaries as Leonardo da Vinci, Raphael, and Michelangelo. Examines the puzzling phenomenon of Mannerism (Pontormo, Rosso, Bronzino, Parmgianino) and the warm, painterly naturalism of Venice (Giorgione, Titian).

FINA–A 537 Selected Topics in Northern Painting (4 cr.)

FINA–A 632 Problems in Early Italian Painting (4 cr.) Selected topics in Italian painting of the thirteenth and fourteenth centuries.

FINA–A 633 Problems in Italian Art of the Fifteenth Century (4 cr.)

FINA–A 634 Problems in Italian Art of the Sixteenth Century (4 cr.)

FINA–A 635 Problems in Italian Art of the Seventeenth Century (4 cr.)

FINA–A 637 Problems in Early Netherlandish Painting (4 cr.)

FINA–A 638 Problems in Sixteenth-Century Art outside Italy (4 cr.)

FINA–A 639 Problems in Seventeenth-Century Art outside Italy (4 cr.)

Modern

FINA–A 440 Nineteenth-Century Painting I (4 cr.)

FINA–A 441 Nineteenth-Century Painting II (4 cr.)

FINA–A 442 Twentieth-Century Art, 1900-24 (4 cr.)

FINA–A 445 American Art to 1860 (4 cr.)

FINA–A 446 American Art, 1860–1900 (4 cr.)

FINA–A 449 Twentieth-Century Art, 1925–70 (4 cr.)

FINA–A 480 Russian Art (3 cr.)

FINA–A 540 Topics in Modern Art (4 cr.) Special topics in the history and study of nineteenth- and twentieth-century European and American Art.

FINA–A 541 European Romantic Landscape Painting, 1750–1850 (4 cr.)

FINA–A 542 American Painting from the Revolution to World War I (4 cr.)

FINA–A 543 History of Twentieth-Century Photography (4 cr.)

FINA–A 544 Russian Art, 1700 to Present (3 cr.) Survey of Russian art concentrating on the period from 1700 to the present. In dealing with Russian realism, turn-of-the-century art, and the Russian avant-garde, the course focuses on changing concepts of national identity and on the social role of art.

FINA–A 545 Post-impressionism and Symbolism (4 cr.) P: Consent of instructor. The major post-impressionist artists and the art of the 1890s: symbolism, the nabis, art nouveau, the secession movements.

FINA–A 546 Roots and Revolution: Early Twentieth-Century Mexican Art (4 cr.) Critical analysis of painting, printmaking, and photography from 1890 to 1950 in relation to political and cultural phenomena.

FINA–A 547 Dada and Surrealism (4 cr.) Stylistic peculiarities, literary affinities, psychological and philosophical concerns of dada and surrealist art will be discussed, with emphasis on the historic position of this art vis-à-vis other modernist movements, especially cubism and abstract expressionism. Works of key figures will be examined, including Duchamp, Picabia, Ernst, Arp, Miró, Tanguy, Magritte, and Matta.

FINA–A 548 American Architecture (4 cr.) Surveys American architecture from the colonial period to the late twentieth century, including public, commercial, and domestic design, with emphasis on historical context and the role of architecture as signifier of social, cultural, and political ideologies.

FINA–A 549 Modernism and Antimodernism in American Art, 1900–1945 (4 cr.) Surveys painting, sculpture, photography, design, and commercial art. Topics include the urban realism of the Ashcan School; the early avant-garde; New York dada; the cult of the machine; regionalist painting and the American heartland; the expressionist landscape; and surrealism, American style.

FINA–A 550 History of Photography (4 cr.) Surveys the history of photography from its beginning to the mid-twentieth century, with focus on theoretical issues as well as the cultural and social contexts of photography and its practices.

FINA–A 589 Topics in Islamic Art (4 cr.) Special topics in the history and study of Islamic art.

FINA–A 640 Problems in Modern Art (4 cr.) Special topics in the problems in modern art.

FINA–A 641 Problems in Romantic Art (4 cr.)

FINA–A 642 Problems in British Painting (4 cr.)

FINA–A 643 Problems in American Art (4 cr.)

FINA–A 644 Problems in French Art (4 cr.)

FINA–A 645 Problems in Late Nineteenth- and Early Twentieth-Century European Art (4 cr.)

FINA–A 646 Problems in Twentieth-Century European Art (4 cr.)

FINA–A 647 Problems in Contemporary European and American Art (4 cr.)

Islamic

FINA–A 527 Formation of Islamic Art (4 cr.) Surveys Islamic art and culture in its formative period from the seventh through the fourteenth centuries. Representative works will be examined from all media. A major goal of the class will be to distinguish the unique characteristics of Islamic art despite its diverse sources and tremendous regional variations.

FINA–A 589 Topics in Islamic Art (4 cr.) Special topics in the history and study of Islamic art.

FINA–A 667 Problems in Islamic Art (4 cr.)

Asian

FINA–A 560 Special Studies in Chinese Art (4 cr.) Topics vary; each is focused on a specific aspect or issue in Chinese art, studied in the context of social and intellectual history. Readings and discussion will emphasize current debates in the field and approaches to the material.

FINA–A 564 Art and Archaeology of Early China (4 cr.) Chinese art and material culture from prehistoric times through the Han dynasty (to ca. 200 A.D.), with particular attention to major archaeological discoveries. Topics include the relationships between art, ritual, and politics; changing beliefs about society and the spirit world as seen in the archaeological record; regional cultures and traditions; and problems in methodology and interpretation.

FINA–A 566 Early Chinese Painting (4 cr.) Chinese painting and pictorial art from the Six Dynasties through the Song dynasty (ca. 200-1300 A.D.). Topics include figure and narrative painting; the culture of landscape, from mountains to gardens; the iconography of flowers, birds, and other small motifs drawn from nature; institutional and private patronage; and the relationships between painting, poetry, and calligraphy.

FINA–A 567 Later Chinese Painting (4 cr.) A history of Chinese painting from the Yuan dynasty (1279-1368) to the twentieth century: art and political protest, the culture of amateur painting, court and professional painters, the development of regional styles, painting as social exchange and interaction, patronage and collecting, and artists' writing on the themes of nature, style, and self-expression.

FINA–A 661 Problems in Japanese Print (4 cr.) The development of style, technique, and iconography in the Japanese print from the seventeenth century to 1860.

FINA–A 662 Problems in Chinese Painting (4 cr.)

Art Theory

FINA–A 471 Theory and Methods of Interarts Studies (4 cr.) Art theory from antiquity through the thirteenth century. Topics include Classical Greek and Roman art theory/early Christian art theory or medieval art theory: East and West.

FINA–A 472 Art Theory II (4 cr.) Art theory of the late Middle Ages and the Renaissance. Topics include fourteenth and early-fifteenth-century art theory in Italy and fifteenth-century art theory in Florence.

FINA–A 473 Art Theory III (4 cr.) Art theory of the seventeenth and eighteenth centuries. Topics include eighteenth-century background in romanticism: England and Germany and classicism and romanticism: 1750-1850 England and France.

FINA–A 474 Art Theory IV (4 cr.) Art theory of the nineteenth and twentieth centuries. Topics include romanticism/realism in France, Baudelaire and romantic theory in France, nineteenth-century German art theory, and late-nineteenth-century French art theory.

FINA–A 671 Problems in Art Theory I (4 cr.) Problems in art theory from antiquity through the thirteenth century.

FINA–A 672 Problems in Art Theory II (4 cr.) Problems in art theory of the late Middle Ages and the Renaissance.

FINA–A 673 Problems in Art Theory III (4 cr.) Problems in art theory of the seventeenth and eighteenth centuries.

FINA–A 674 Problems in Art Theory IV (4 cr.) Problems in art theory of the nineteenth and twentieth centuries.

Art of Africa, Oceania, and Pre-Columbian America

FINA–A 452 Art of Pre-Columbian America (4 cr.)

FINA–A 453 Art of Sub-Saharan Africa I: Art of Africa's Western Sudan (4 cr.)

FINA–A 454 Art of Sub-Saharan Africa II: Arts of the West African Coast (4 cr.)

FINA–A 458 Topics in the Ethnographic Arts (4 cr.)

FINA–A 551 Art of the South Pacific (4 cr.)

FINA–A 552 Art of Eastern and Southern Africa (4 cr.)

FINA–A 555 Art, Craft, and Technology in Sub-Saharan Africa (4 cr.)

FINA–A 556 Art of Central Africa (4 cr.) Analysis of visual art traditions of central Africa, focusing primarily on Zaire, but also including arts from Cameroon, Gabon, Congo, the Central African Republic, and Angola.

FINA–A 650 Problems in African Art (4 cr.)

General

FINA–A 495 Readings and Research in Art History (1–4 cr.)

FINA–A 500 Historiography of Western Art (4 cr.)

FINA–A 575 Research Sources in Art History (2 cr.) Required of all entering M.A. degree candidates. Introduction to basic bibliography and literature of the history of art.

FINA–A 580 Topics in Art History (4 cr.) Special topics in the history and study of Art History in various centuries.

FINA–A 590 Museum Studies (4 cr.) Designed to utilize the resources of the Indiana University Art Museum for academic research. Topics vary and include cataloging, technical examination, and organizing exhibitions.

FINA–A 595 Master's Essay Research (1–4 cr.) Readings and research for the M.A. essay in the history of art. The essay is required; enrollment in the course is optional.

FINA–A 690 Burke Seminar in the History of Art (1–4 cr.) A seminar conducted by a visiting professor in conjunction with a member of the art history faculty. The topic, format, and length of the seminar will vary.

FINA–A 775 Advanced Readings and Research (arr.–8 cr.)

FINA–A 778 Tutorial Using Infrared Reflectography (2–6 cr.) P: Consent of instructor. Individual instruction, readings, and problems of interpretation related to the use of infrared reflectography in the technical examination of works of art.

FINA–A 779 Directed Field Work (arr. cr.) Specialized research in museums and libraries or archaeological sites, in fields closely related to student's doctoral dissertation.

FINA–A 780 Fieldwork Using Infrared Reflectography (2–6 cr.) P: Consent of instructor. Individual instruction, readings, and problems of interpretation related to fieldwork using infrared reflectography in the gathering of data for specific research projects.

FINA–A 879 Doctoral Dissertation (arr. cr.)

Studio

Ceramics

FINA–S 461 Ceramics III (arr. cr.)

FINA–S 561 Graduate Ceramics (arr. cr.) Studio techniques: advanced practice in the use of clay for expression or functional ceramics purposes. Theory: clay and body compositions glaze; materials, oxides, glaze compositions and calculation, firing procedures.

FINA–S 564 Basic Glaze Composition (3 cr.) An investigation of the effect of high-oxide glaze materials and their mixtures in terms of fusibility, transparency temperatures on single and multiple opacity, surface, and other qualities. Will include much weighing, applying, and firing of glaze test batches. Also blending systems, glaze calculations, and compositional charting.

FINA–S 569 M.F.A. Ceramics Seminar (1 cr.) P: Admission to the M.F.A. program in ceramics. Discussions, critiques, and research projects in ceramic art. Required each semester for M.F.A. candidates in ceramics.

FINA–U 760 Ceramics Adv Studio Projects (1–12 cr.) Directed graduate-level independent study in ceramics. Requires authorization of the instructor.

FINA–G 860 M.F.A. Thesis in Ceramics (1–12 cr.) Final semester of MFA program and creation of Thesis Exhibition. Open to M.F.A. students in graphic design only. Requires authorization of the instructor.

Digital Arts

FINA–D 510 Digital Art: Advanced Practice (3 cr.) Opportunity for students to investigate the computer as an interactive tool in the process of art making while examining aesthetics and processes of major artists working in this field. Provides the opportunity for exploration of the computer's potential use in the art work of each class member.

FINA–D 511 Graduate Digital Art (1–12 cr.) Through advanced studio projects in digital art, the student will create a body of work involving experimentation with technology incorporating installation, multimedia, networks, virtual environments, and/or portable media. Topics of relevance to contemporary digital art will be considered, such as interaction, time-based media, location, and virtuality.

FINA–D 512 Graduate Digital Art Seminar (3 cr.) Investigates the relationship between art, aesthetics, and technology. Topics can include virtual environments, screen-media, sound art, time-based media, networked art, and locative media, as well as related history, criticism, and theory. Coursework includes readings, discussions, and research-based projects, papers, or presentations.

FINA–D 730 Digital Media Advanced Studio Projects (1–10 cr.) Through advanced studio projects involving digital media the student will produce refined artistic statements involving experimentation with VR technology installations and multimedia presentations.

FINA–G 810 M.F.A. Thesis in Digital Art (1–12 cr.) Final semester of M.F.A. program and creation of Thesis Exhibition. Open to M.F.A. students in digital art only. Requires authorization of the instructor.

FINA–T 520 Video Art (3 cr.) Exploration of the medium of video as an aesthetic expression. Time and sound are elements incorporated into visual composition's traditional concern. Emphasis on technical command of one-half-inch VHS camera and editing procedures in conjunction with development of a visual sensitivity. Readings and a research project are also required.

FINA–U 710 Digital Art Advanced Studio Projects (1–12 cr.) P: Consent of instructor. Independent study in computer art. Faculty and student consultation will determine project and credit hours.

Drawing

FINA–S 401 Drawing III (3 cr.)

FINA–S 501 Graduate Drawing (arr. cr.) Concentrated and advanced work in drawing for graduate students in the School of Fine Arts. Advanced problems in drawing for graduate fine arts majors. Work is done under supervision in the classroom or independently at the discretion of the instructor.

FINA–S 503 Anatomy for the Artist (3 cr.) Intensive lecture/studio course describing all of the bones and muscles of the body. The emphasis is on joint movement and proportion. The areas of the body are divided into 3-D mass conception, bone and muscle description, and joint description. Students draw from the skeleton, plaster cadaver casts, and the human figure.

Graphic Design

FINA–S 451 Graphic Design Problem Solving (arr. cr.)

FINA–S 551 Graduate Design (arr. cr.) Graphic design as an integral element of all visual communication media. Self-defined and assigned study to assure as wide as possible exposure to the problem-solving process.

FINA–S 555 Practice and History of Graphic Design (3 cr.) The history of graphic design will be considered with a focus on practice in Western Civilization and regular comparisons to other cultures. Design projects and reports by students are structured to provide graphic design experience and reflection on the historical topics covered.

FINA–S 559 Graphic Design Advanced Seminar: Topics in History, Theory, and Criticism (3–5 cr.) Provides background on major graphic design movements, the design of the alphabet and type styles, the use of tools (printing press, woodcut, engraving, camera, airbrush, computer). Social and political forces such as industrial development and nationalism will be considered. Writings of theorists and historians will be reviewed.

Hand Papermaking

FINA–S 417 Hand Papermaking I (3 cr.)

FINA–S 418 Hand Papermaking II (1–3 cr.)

Jewelry Design and Silversmithing

FINA–S 481 Jewelry Design and Silversmithing III (arr. cr.)

FINA–S 581 Graduate Jewelry Design and Silversmithing (arr. cr.) P: S481. Creative designing and drawing of two- and three-dimensional forms for jewelry, hollowware, flatware, enameling and casting (e.g., bracelets, pins, necklaces, rings, chains); stone setting. Experiments in texture and repoussé; filigree, gilding, and granulation. Stretching, krimping, coursing, and seaming techniques in silversmithing. Cloisonné, champlevé, plique-à-jour, and sgraffito enameling.

FINA–S 582 Graduate Seminar in Jewelry Design and Silversmithing (1 cr.) Weekly critique, assigned readings, discussions, slide lectures, and special research projects for graduate students enrolled in the M.F.A. program in jewelry design and silversmithing.

FINA–U 780 Metalsmithing Adv Studio Projects (1–12 cr.) Directed graduate-level independent study in metalsmithing and jewelry design. Requires authorization of the instructor.

FINA–U 880 M.F.A. Thesis in Metalsmithing and Jewelry Design (1–12 cr.) Final semester of M.F.A. program and creation of Thesis Exhibition. Open to M.F.A. students in metalsmithing and jewelry design only. Requires authorization of the instructor.

Painting

FINA–S 431 Painting III (arr. cr.) May be repeated for a total of 20 credit hours.

FINA–S 438 Water Media (arr. cr.)

FINA–S 530 Graduate Nonsource Drawing Seminar (1–6 cr.) Drawing away from a specific source. Students are encouraged to generate their own sources and technical choices under close faculty supervision. Content and composition are stressed, as is craftsmanship. (Open to M.F.A. painters only.)

FINA–S 531 Graduate Painting (arr. cr.) Independent work in painting for candidates for the M.F.A. degree majoring in painting.

FINA–S 532 Graduate Painting Seminar (1 cr.) Weekly critical review of student work. (Open to M.F.A. painters only.)

FINA–S 535 Graduate Drawing Seminar (1–3 cr.) General seminar on source drawing. Sessions from the model will be made available. Examples of drawing from the history of art are used in reference to each student's particular stylistic bias. Stylistic development as well as composition are stressed along with a concentration on craftsmanship.

FINA–U 730 Painting Adv Studio Projects (1–12 cr.) Directed graduate-level independent study in painting. Requires authorization of the instructor.

FINA–U 830 M.F.A. Thesis in Painting (1–12 cr.) Final semester of M.F.A. program and creation of Thesis Exhibition. Open to M.F.A. students in painting only. Requires authorization of the instructor.

Photography

FINA–S 591 Graduate Photography (arr. cr.)

FINA–S 491 Advanced Photography II (arr. cr.) P: S392 and consent of instructor. Three (3) credits for undergraduates.

FINA–S 595 Graduate Photography Seminar (4 cr.) Primarily for graduate students in photography. Oral and written study of significant topics in the history, criticism, and theory of photography. Topic varies.

FINA–U 790 Photography Adv Studio Projects (1–12 cr.) Directed graduate-level independent study in photography. Requires authorization of the instructor.

FINA–G 890 M.F.A. Thesis in Photography (1–12 cr.) Final semester of M.F.A. program and creation of Thesis Exhibition. Open to M.F.A. students in photography only. Requires authorization of the instructor.

Textiles

FINA–S 511 Graduate Textile Design (Printed) (arr. cr.) Variety of silkscreen procedures, blockprinting, batik, tie-dye, and commercial dyeing as these apply to design for yardage and to compositional hangings. Emphasis on drawing, two-dimensional design, and creative exploration in mixed printing and dyeing media. Research in the history of textiles.

FINA–S 421 Textile Design III—Woven and Constructed (arr. cr.) P: S321. A continued exploration of woven and constructed textiles with an emphasis on independent investigation and production.

FINA–S 425 Textile Design III—Printed and Dyed (arr. cr.) P: S325. A continued exploration of printed and dyed textiles with an emphasis on independent investigation and production.

FINA–S 521 Graduate Textile Design (arr. cr.) Intensive directed study in textiles. For students admitted to the M.F.A. program in textiles.

FINA–U 720 Textiles Adv Studio Projects (1–12 cr.) Directed graduate-level independent study in textiles. Requires authorization of the instructor.

FINA–U 820 M.F.A. Thesis in Textiles (1–12 cr.) Final semester of M.F.A. program and creation of Thesis Exhibition. Open to M.F.A. students in textiles only. Requires authorization of the instructor.

Printmaking

FINA–S 441 Printmaking III Intaglio (arr. cr.)

FINA–S 443 Printmaking III Lithography (arr. cr.)

FINA–S 444 Printmaking III Silkscreen (arr. cr.)

FINA–S 541 Graduate Printmaking (arr. cr.) Open to M.F.A. printmaking students only.

FINA–S 545 Graduate Printmaking Seminar (3 cr.) Deals with both theoretical and practical issues in contemporary art. Discussions will be based on selected readings, including relevant suggestions from the participants. Students will make slide presentations on

the influences and development of their work as well as a collaborative project.

FINA–S 546 Relief Printmaking Media (1–12 cr.) P: S240 or consent of instructor. Woodcut, linocut, monotype, and collograph. Students will create prints in each medium in both black and white and in color using a variety of traditional and innovative techniques such as photography and the computer.

FINA–U 740 Printmaking Adv Studio Projects (1–12 cr.) Directed graduate-level independent study in printmaking. Requires authorization of the instructor.

FINA–U 840 Thesis in Printmaking (1–12 cr.) Final semester of M.F.A. program and creation of Thesis Exhibition. Open to M.F.A. students in printmaking only. Requires authorization of the instructor.

Sculpture

FINA–S 471 Sculpture III (3–6 cr.)

FINA–S 571 Graduate Sculpture (arr. cr.) Students working on an advanced level develop a body of work while working under the guidance of a faculty member.

FINA–S 572 Graduate Sculpture Seminar (1 cr.) Addresses issues of relevance to artists working today, e.g., the current political and social climate affecting the art world, historical references from which we have developed. In addition, the seminar provides an opportunity to critique and review students' artwork.

FINA–U 770 Sculpture Adv Studio Projects (1–12 cr.) Directed graduate-level study in sculpture. Requires authorization of the instructor.

FINA–U 870 MFA Thesis in Sculpture (1–12 cr.) Final semester of MFA program and creation of Thesis Exhibition. Open to MFA students in sculpture only. Requires authorization of the instructor.

General

FINA–N 408 Advanced Drawing for the Nonmajor (3 cr.)

FINA–R 508 Contemporary Art Issues and Cultural Themes (3 cr.) Focuses on modern and recent art movements.

FINA–R 590 Seminar in the Visual Arts (2 cr.) Examination of issues posed by recent art and criticism. Topics vary with the instructor and year. Consult Schedule of Classes for current information on content.

FINA–S 695 AI Training Seminar (1 cr.) Topics include effective communication of ideas about the visual arts; health and safety regulations relevant to studio courses; grading; critiquing; and a number of course-specific teaching issues. Students also will make practice teaching presentations, which will be videotaped and reviewed by the class.

FINA–U 501 Special Topics in Studio Art (1–3 cr.) Selected topics in studio art not ordinarily covered in other departmental courses.

FINA–U 750 Graphic Design Advanced Studio Projects (1–12 cr.) This course is eligible for a deferred grade. Directed graduate-level independent study in graphic design. Requires authorization of the instructor.

FINA–G 750 Graduate Study Projects (1–12 cr.)

FINA–G 800 M.F.A. Thesis (arr. cr.) This course is eligible for a deferred grade.

Cross-Listed Courses

Communication and Culture
C503 Introduction to Media Theory and Aesthetics (3 cr.)
C506 Methods of Media Research (3 cr.)
C552 Media Institutions and the Production of Culture (3 cr.)
C560 Motion Picture Production (3-4 cr.)
C561 Intermediate Motion Picture Production (4 cr.)
C562 The Screenplay (4 cr.)
C592 Media Genres (3 cr.)
C594 History of European and American Films II (4 cr.)
C596 National Cinemas (3 cr.)
C606 Media Criticism (3 cr.)
C610 Identity and Difference (3 cr.)
C620 Media, Culture, and Politics (3 cr.)
C652 Globalization of Media (3 cr.)
C691 Authorship in the Cinema (4 cr.)
C792 Film History and Theory (4 cr.)
C793 Seminar in Media Studies (3 cr.)

Comparative Literature
C692 Comedy in Film and Literature (4 cr.)
C693 Film Adaptations of Literature (4 cr.)
C790 Studies in Film and Literature (4-12 cr.)

East Asian Languages and Cultures
E533 Studies in Chinese Cinema (3 cr.)

English
L780 Special Studies in English and American Literature (4 cr.) Topics on film.

Italian
M455 Readings in the Italian Cinema (3 cr.) May be repeated once for credit.
M500 Seminar in Italian Cinema (3 cr.)

Telecommunications
R540 Special Projects in Telecommunications (cr. arr.)

Folklore and Ethnomusicology

College of Arts and Sciences

Departmental E-mail: folkethn@indiana.edu

Departmental URL: www.indiana.edu/~folklore

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Fields of Study

The Department of Folklore and Ethnomusicology offers training in a number of subfields of folklore, including oral narrative, song, material culture, ritual, festival, worldview, as well as ethnomusicology, the study of music as culture, with emphasis on area studies, theory, and presentation and preservation of music. The department is dedicated to the study of expressive forms traditional, contemporary,

vernacular, and popular within an integrative academic program. Students and faculty conduct research in a range of world areas, using diverse research methods: ethnographic, historical, archival, and laboratory. Students prepare for careers in a variety of academic and public settings. The department offers a graduate concentration in public practice that emphasizes research, critical orientations, and practical skills in the areas of public education, preservation, and presentation.

Special Requirements

(See also general University Graduate School requirements.)

Admission Requirements

A good undergraduate record in any of the humanities or social sciences will be acceptable for admission to graduate study in folklore and ethnomusicology. Graduate Record Examination General Test scores are required (recommended but not required for international students whose first language is not English). Students may be admitted to graduate study in folklore and ethnomusicology, concentrating in either folklore or ethnomusicology, in one of three categories: (1) M.A., (2) Ph.D., or (3) M.A./Ph.D.

Grades

The department will accept no course for credit toward a degree in which the grade is lower than a B– (2.7). All students must earn a B (3.0) or better in the required department courses and maintain a grade point average of at least 3.2.

Master of Arts Degree

Foreign Language Requirement

Reading proficiency in one modern foreign language. Must be completed before M.A. project/thesis is submitted.

Project/Thesis

Project/Thesis required. Students may earn up to 6 credit hours for an M.A. project/thesis. A comprehensive oral examination is given when the project/thesis is submitted.

Master of Arts Track in Folklore

Course Requirements

A minimum of 30 credit hours, including F501, F516, F523, and F525 or F517. Four additional approved courses in the department.

Master of Arts Track in Ethnomusicology

Course Requirements

A minimum of 30 credit hours including the ethnomusicology courses F501, E522, F523, E529, E714, and F794, and two additional approved courses, one of which must be in the Department of Folklore and Ethnomusicology.

Dual Master's Degrees

Foreign Language Requirement

Reading proficiency in one modern foreign language. Must be completed before M.A. project/thesis is submitted.

Project/Thesis

Project/thesis required. Students may earn up to 6 credit hours for the project/thesis. A comprehensive oral examination is given when the project/thesis is submitted.

Admission Requirements

Students must be admitted by both programs to pursue the dual degree.

Dual Master of Arts and Master of Library Science Degrees

Study for these two degrees can be combined for a total of 51 credit hours rather than the 66 credit hours required for the two degrees taken separately. Students take at least 30 graduate credit hours in library science and at least 21 credit hours in folklore and ethnomusicology.

Folklore and Ethnomusicology Course Requirements

F501; one of the following: F516, F517, E522, or E529; and either F523 or F525; four additional approved courses in the department and a project/thesis.

Dual Master of Arts and Master of Information Science Degrees

The joint program consists of a total of at least 57 credit hours: a minimum of 36 graduate credit hours in information science and a minimum of 21 credit hours in folklore and ethnomusicology.

Folklore and Ethnomusicology Course Requirements

F501; one of the following: F516, F517, E522, or E529; and either F523 or F525; four additional approved courses in the department and a project/thesis.

Dual Master of Arts Degree: Journalism and Folklore and Ethnomusicology

The School of Journalism and the Department of Folklore and Ethnomusicology offer a joint Master of Arts Degree. This degree is intended for a wide range of students, including those interested in community-based journalism, management and public relations work at various arts organizations, and other areas.

Folklore and Ethnomusicology Course Requirements

A total of 24 credit hours, F501; one of the following: F516, F517, E522, or E529; and either F523 or F525; five additional approved courses in the department. Students must fulfill the language requirement and submit a thesis/project.

Students in this dual program are required to complete the thesis/project that is required for the Folklore and Ethnomusicology M.A.; they may develop their thesis/project to integrate their Folklore and Ethnomusicology interests and their Journalism interests, with a committee of two Folklore/Ethnomusicology faculty and one or more Journalism faculty.

In addition to the 24 credits required by the School of Journalism and the 24 credits required by Folklore and Ethnomusicology, students must complete at least two additional credit hours to fulfill the university's 50-credit minimum for any dual M.A.

Doctor of Philosophy Degree

Admission Requirement

M.A. degree (may comprise 30 of the 90 required credits).

Minors

At least one minor required; a second minor is optional. Students opting for the Ph.D. program with a double major may count the area outside of folklore and ethnomusicology as the equivalent of two minors if approved by the Department of Folklore and Ethnomusicology.

Foreign Language Requirement

Reading proficiency in two foreign languages. Must be completed before qualifying examination is taken. In special cases, and in consultation with a student's advisory committee, a student may submit a written petition to the Director of Graduate Studies to substitute in-depth language proficiency in one language for proficiency in two languages.

Qualifying Examinations

Written examination in three parts (theory, genre, and area specialties), followed by oral examination.

Research Proposal

Must be approved by the research committee, a majority of whose members must be faculty of folklore and ethnomusicology.

Final Examination

Defense of the dissertation.

Ph.D. Track in Folklore

Course Requirements

A total of 90 credit hours, 36 of which are specific folklore courses including F501, F516, F517, F523 and F525, seven additional approved courses in the department, and a dissertation.

Ph.D. Track in Ethnomusicology

Course Requirements

A total of 90 credit hours, at least 24 of which are the following specific ethnomusicology courses including F501, E522, F523, F528, E529, E714, F740, and F794. Four additional courses for the major, at least three of which must be in the department; three of these courses must be approved courses that fulfill one of the three tracks: Social and Cultural Theory (F722 is a required course), Preservation and Presentation (E522, F510, and F803 or an approved performance ensemble, which may include approved ensembles in the School of Music, are required), and World Area.

Ph.D. Minor in Ethnomusicology

See section under Ethnomusicology elsewhere in this bulletin.

Ph.D. Minor in Folklore

Doctoral students in other departments may obtain a minor in folklore by completing 12 credit hours (four graduate folklore courses). Three (3) credit hours must be in one of the required courses: F501, F516, F517, F523, or F525. Contact the graduate advisor for approval of courses.

Ph.D. Internal Minor in Folklore for Students in the Ethnomusicology Track

Students pursuing the Ethnomusicology track may earn an internal minor in Folklore by completing four courses (for a total of 12 hours) that are outside of their major requirements and that deal with non-musical folklore topics (for example, material culture or oral narrative). Students must complete one of the following courses: F516, F517, or F525. All other courses must be approved in advance for the minor by the Director of the Folklore Institute. Students should contact the Director of the Folklore Institute for further information on this minor.

Faculty

Chairperson

Associate Professor Jason Baird Jackson*

Director, Folklore Institute

Associate Professor Jason Baird Jackson*

Director, Ethnomusicology Institute

Professor Mellonee Burnim*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

College Professor

Henry H. Glassie* (Emeritus)

Distinguished Professors

Richard Bauman* (Emeritus), Linda Dégh* (Emerita)

Professors

Mary Ellen Brown* (Emerita), Mellonee Victoria Burnim*, Sandra Kay Dolby*, Hasan M. El-Shamy*, Diane Goldstein*, William Hansen* (Emeritus, Classical Studies), Roger L. Janelli* (Emeritus), Portia K. Maultsby*, John H. McDowell*, Lewis Rowell* (Emeritus, Music), Beverly J. Stoeltje* (Anthropology), Ruth M. Stone*, William Wiggins Jr.* (Emeritus, African American and African Diaspora Studies)

Associate Professors

Judah Cohen*, Jason Baird Jackson*, John W. Johnson* (Emeritus), Daniel Boyce Reed*, Gregory A. Schrempp*, Pravina Shukla*

Associate Scholar

Inta Gale Carpenter

Assistant Professors

Michael Dylan Foster, Javier León, David Anthony McDonald

Senior Lecturer

Sue Tuohy

Adjunct Professors

John Bodnar* (History), Raymond DeMallie* (Anthropology), Anya Peterson Royce* (Anthropology)

Adjunct Associate Professors

Michael Evans* (Journalism), Jane E. Goodman* (Communications and Culture), Stephanie C. Kane* (Criminal Justice), Susan Seizer* (Communication and Culture)

Director of Graduate Studies

Associate Professor Daniel B. Reed*

Courses

FOLK–E 522 The Study of Ethnomusicology (3 cr.) Introduction to the discipline: history, scope, definitions of ethnomusicology; key issues, points of debate; ethnomusicologists and their work; resources for research, teaching, and other activities in which ethnomusicologists engage. Background for more specialized courses in fieldwork, theory, intellectual history, and world areas. Credit given for only one of FOLK E522 or F522.

FOLK–E 529 Musical Cultures as Systems of Meaning (3 cr.) This course explores a range of ideologies, processes, and patterns that define musical cultures across the globe. Focus on the concept of music as culture by examining historical and contemporary issues in cross-cultural perspective. Credit given for only one of FOLK E529 or F529.

FOLK–E 536 Applied Ethnomusicology and Folklore: Media Productions (3 cr.) Examines the application of ethnomusicology and folklore training in media productions for cultural institutions and commercial industries. A focus on the role of humanists as researchers, consultants, music supervisors, and filmmakers for public media institutions (i.e. PBS, BBC, NPR, PRI), multimedia production companies, and commercial film industries.

FOLK–E 601 Chinese Film and Music (3 cr.) Introduces students to Chinese film, music, and film and music industries. Focus on ethnomusicological approaches to the study of film, methods for reading film music, and learning to read Chinese films and listen to their soundtracks in relation to their representations of Chinese culture.

FOLK–E 607 Music in African Life (3 cr.) Study of how Africans create, perform, think about, and use music in their lives. Topics include traditional and popular musical styles in relationship to social and historical contexts, as well as translocal, transnational, and global cultural and musical exchanges in which Africans participate. Credit given for only FOLK E607 or F607.

FOLK–E 608 Music in African Film (3 cr.) Music is an integral part of African films, whether they are made by Hollywood or by African directors. The course will explore how various film musics are conceived and how these musics may be interpreted by audiences, composers, and filmmakers. Credit given for only FOLK E608 or F608.

FOLK–E 639 Music & Nationalism in Latin America (3 cr.) Explores relationships between changing concepts of nation and national identity, local, social, and political processes, and artists whose performances and creations have been seen as national symbols. Theories of nationalism, explored through case studies from various periods and nations of Latin America.

FOLK–E 688 Motown (3 cr.) This course surveys the development of Motown Record Corporation, Detroit Era (1959-1972). Through lecture, discussion, guided listening and visual experiences the course studies the musical works, creative processes, business practices, historical events, media, technology, and sociocultural factors that contributed to Motown's identity as a unique artistic and cultural phenomenon.

FOLK–E 694 Issues in African American Music (3 cr.) A chronological overview of the primary genres of African American music, from slavery to present. Emphasis placed on understanding the separate identities of individual genres, and examining those processes by which they are interrelated and are cultural objects for appropriation. Credit given for only one of FOLK E694, FOLK F694, or AAAD A594.

FOLK–E 697 African American Popular Music (3 cr.) An examination of African American popular music from 1945-2000. Organized topically, this course will examine the production of this tradition as a black cultural product and its transformation into a mass marketed commodity for mainstream and global consumption. Credit given for only one of FOLK E697 or AAAD A687.

FOLK–E 698 African American Religious Music (3 cr.) Using both a sociocultural and a historical perspective, this course explores the major forms of African American religious music indigenous to the United States (Negro spirituals and gospel music), as well as those Euro-American musical expressions that have emerged as integral parts of the African American worship experience.

FOLK–E 699 Theoretical Perspectives in African American Music (3 cr.) A critique of the theoretical perspectives of African American music rendered in seminal publications by scholars of various disciplines employed from the 19th century to the present that have shaped underlying assumptions in narratives on this tradition. Credit given for only one of FOLK E699 or FOLK F725.

FOLK–E 714 Paradigms of Ethnomusicology (3 cr.) Examines the current paradigms for conducting ethnomusicological research. Emphasis on theoretical frameworks and specific examples of application within the disciplines. Credit given for only FOLK F714 or E714.

FOLK–F 501 Colloquy in Folklore/Ethnomusicology (3 cr.) Introduces students to the content, methodologies, and theoretical perspectives, and intellectual histories of folklore and ethnomusicology.

FOLK–F 510 Multimedia in Ethnomusicology (3 cr.) Explores the use of multimedia technology in five basic areas of ethnographic activity: field research, laboratory research (transcription and analysis), preservation, presentation, and publication. Knowledge of technological concepts and skill development in the use of various technologies are pursued through a project-based approach, which emphasizes learning by doing.

FOLK–F 516 Folklore Theory in Practice (3 cr.) An introduction to scholarly practice, developing an integrated

idea of folklore as a topic of study and as a way to conduct research.

FOLK–F 517 History of Folklore Study (3 cr.) Graduate introduction to conceptual foundations in folklore, such as social base of folklore, tradition, folklore and culture history, folklore as projection, genre, function, structure, text, and context, through a historical survey of approaches to folklore topics.

FOLK–F 523 Field Work in Folklore/Ethnomusicology (3 cr.) Theories and methods of conducting field research, including research design, methods of data gathering, research ethics, and presentation of research results.

FOLK–F 525 Readings in Ethnography (3 cr.) Historical survey of main styles of ethnographic research, with emphasis on three types of theoretical considerations: 1) relationship between ethnographic research and the changing academic, political, cultural, and artistic contexts in which it is situated; 2) ethnographers as individuals whose specific backgrounds and aspirations influence their work; and 3) close attention to the methods employed by specific ethnographers.

FOLK–F 527 Folk Poetry and Folksong (3 cr.) Examination of written and performed folk poetry, ritual, political, domestic, or occupational verse, blues, or popular song; scholarly perspectives associated with these forms.

FOLK–F 528 Advanced Fieldwork (3 cr.) P: F523. While F523 offers a comprehensive survey of the complex and multi-faceted enterprise, this course (F528) chooses one element of the fieldwork and focuses on it as a theme for an entire semester. This course also offers advanced graduate students additional guided experience conducting fieldwork in a workshop-like setting.

FOLK–F 532 Public Practice in Folklore and Ethnomusicology (3 cr.) Explores the breadth of professional practice in Folklore and Ethnomusicology outside of college and university settings. Emphasis is placed on the development of conceptual knowledge central to publicly engaged scholarship irrespective of the particular contexts in which scholars might be employed.

FOLK–F 535 Ritual and Festival (3 cr.) Traditional rituals and festivals include symbolic forms of communication and a range of performance units: drama, religious expression, music, sports, the clown. Interpretive models permit cross-cultural examination of these phenomena in the United States, Africa, Latin America, Europe, Asia, etc., though study focuses only on a few events in context.

FOLK–F 540 Material Culture and Folklife (3 cr.) Material culture presented within the context of folklife, including folk architecture, folk crafts, folk art, traditional foodways, folk museums, folklife research methods, and the history of folklife research.

FOLK–F 545 Folk Narrative (3 cr.) Examination of myths, folktales, legends, jokes, fables, anecdotes, personal narratives, or other forms of folk narrative. Attention given to the content, form, and functions of the narratives as well as the variety of theories and methodologies employed in their study.

FOLK–F 600 Asian Folklore/Folk Music (3 cr.) Folk religion, material culture, social customs, oral literature, and folk music of Asian societies. Relationship between political movements and the use of folklore scholarship. Transformations of traditions in modern contexts.

FOLK–F 609 African and Afro-American Folklore/Folk Music (3 cr.) Folklore, oral prose and poetry, and music of African societies from the precolonial to the modern national period. The perpetuation of African traditions and the creation of new folklore forms among Afro-Americans in the United States.

FOLK–F 617 Middle East Folklore/Folk Music (3 cr.) Intensive comparative studies of selected genres, including epics, oral narratives, folk drama, ritual and festival, riddles, proverbs, and folk music. Emphasis on analyses of genres in their social and cultural contexts.

FOLK–F 625 North American Folklore/Folk Music (3 cr.) Folk and popular traditions of the United States and Canada. Topics include the social base of American folklore, analytical frameworks for the study of American folklore, prominent genres of American folklore and folk music, national or regional character, and American folk style.

FOLK–F 634 Jewish Folklore and Ethnology (3 cr.) Introduces the history, methods, and issues of ethnographic study among Jewish populations, focusing on the United States and Israel. Through close readings of major works, this class will explore how research in this complex topic has used ethnography to investigate—and negotiate—memory, religious life, politics, ethnicity, and identity.

FOLK–F 635 European Folklore/Folk Music (3 cr.) Forms of folklore and folk music in Europe; historical and contemporary European scholarship in folklore and ethnomusicology.

FOLK–F 638 Latin American Folklore/Folk Music (3 cr.) In-depth treatment of traditional expressive forms (musical, verbal, kinetic, festive, etc.) in the various populations of Latin America, with emphasis on the historical evolution of these forms and their contribution to the articulation of contemporary Latin American identities.

FOLK–F 640 Native American Folklore/Folk Music (3 cr.) Comparative examination of various verbal, musical, and dance forms of Native American societies in North and South America. Examination of contributions of folklore and ethnomusicological scholarship to Native American studies.

FOLK–F 651 Pacific Folklore/Folk Music (3 cr.) Folklore, folklife, music, and dance of Australia, New Zealand, and native Oceanic societies. Topics include the cultures of aboriginal and settler populations, retention and adaptation of European traditions, perpetuation and adaptation of aboriginal materials, and the emergence of “native” traditions among the settler and immigrant groups.

FOLK–F 712 Body Art: Dress and Adornment (3 cr.) This seminar analyzes the different ways in which human beings throughout the world shape, dress, ornament, and decorate their bodies, focusing on the meaningful communication of these artistic forms. Class topics will include tattoo, scarification, face painting, makeup, henna, hair, jewelry, and dress—daily attire, costume, folk dress, uniforms.

FOLK–F 713 Food: Art and Identity (3 cr.) This seminar centers on the topic of food—the production, preparation, and consumption—applying a material culture model to the study of food. While food is an expression of cultural identities, it is also a powerful vehicle for the expression of individual identities, preferences, and aesthetics.

FOLK–F 715 (ENG L715) English and Scottish Popular Ballads (4 cr.) Students' investigation of principal problems met in ballad scholarship. Special attention to textual relationships, dissemination, and unique qualities of genre.

FOLK–F 722 Colloquium in Theoretical Folklore/ Ethnomusicology (3 cr.) Intensive examination of social scientific theories and an assessment of their relevance to folklore/ethnomusicology scholarship.

FOLK–F 730 Museums and Material Culture (3 cr.) This class analyzes the complex relationship between human beings and the material world they inhabit and create to better comprehend the institution of the museum. An understanding of material culture helps us view how makers, users, and viewers relate to objects in homes, commercial establishments and eventually, in museums.

FOLK–F 731 Archiving Principles and Bibliography in Folklore and Ethnomusicology (3 cr.) History, methods, and principles of field collections and documentation, storage and preservation, cataloging and classification, bibliography, and ethical concerns.

FOLK–F 734 Folklore and Literature (3 cr.) The study of folklore forms and themes as they articulate with literary forms. Emphasis on understanding folklore concepts and theories for literary interpretation, and on the problems posed by literature that contribute to the interpretation of folklore.

FOLK–F 736 Folklore and Language (3 cr.) Linguistic or linguistically informed approaches to speech play and verbal art that are especially relevant to the concerns of folklorists.

FOLK–F 738 Psychological Issues in Folklore (3 cr.) P: Consent of instructor. Major areas addressed: psychological principles in early folklore scholarship; principles of learning applied to traditions; social learning; attitudes: performance and retention; systemic qualities; cybernetics: "material" and "kinetic" culture; folkloric behavior in mental health and morbidity; unrecognized ties to psychological theories; uses of folklore to educators and psychologists.

FOLK–F 740 History of Ideas in Folklore/ Ethnomusicology (3 cr.) Examination of the intellectual history of folklore and ethnomusicology, emphasizing the social, political, and ideological forces that have influenced the development of the field. Required for M.A. and Ph.D. students.

FOLK–F 750 Performance Studies (3 cr.) Examination of performance-centered theory and analysis in folklore, ethnomusicology, and adjacent fields.

FOLK–F 755 Folklore, Culture, and Society (3 cr.) Relationship of folklore, culture, and social organization. Beliefs, values, and social relations in the folklore of various societies. Special topics include gender, children, and ethnicity.

FOLK–F 792 Traditional Musical Instruments (3 cr.) Classification, distribution, and diffusion of folk and traditional musical instruments. Construction and performance practices. Relation to cultural and physical environment. Demonstration with instruments in the collection of the university museum.

FOLK–F 794 Transcription and Analysis in Folklore/ Ethnomusicology (3 cr.) P: Consent of instructor. Problems in transcription, analysis, and classification of music sound and texts. Required of M.A. and Ph.D. students in ethnomusicology.

Special Function Courses

FOLK–F 800 Research in Folklore (arr.–9 cr.) This course is eligible for a deferred grade.

FOLK–F 801 Teaching Folklore (0–3 cr.) Prepares graduate students to teach in Folklore and Ethnomusicology; includes practical instruction in teaching methods, lesson preparation, teaching observations, course design, teaching portfolio preparation, and discussion of folklore and ethnomusicology in college curriculum. Required of all first time Instructors and Associate Instructors.

FOLK–F 802 Traditional Arts Indiana (1–3 cr.) Designed as a practicum for students to work collaboratively in applying the methods and approaches of folklore studies to public needs and public programs. Students will engage in a variety of outreach projects linking the university to the larger community in the areas of public arts and culture and cultural documentation.

FOLK–F 803 Practicum in Folklore/Ethnomusicology (1–6 cr.) P: Consent of instructor. Individualized, supervised work in publicly oriented programs in folklore or ethnomusicology, such as public arts agencies, museums, historical commissions, and archives. Relevant readings and written report required.

FOLK–F 804 Special Topics in Folklore/ Ethnomusicology (1–6 cr.) Topics will be selected in areas of folklore or ethnomusicology not covered in depth in existing courses.

FOLK–F 840 Research Seminar (3 cr.) Prepares students for their dissertation research by examining the research process and requiring from them a short draft and an expanded draft of a research proposal. This course is strongly recommended for students in the Ph.D. program.

FOLK–F 850 Thesis (arr. cr.) This course is eligible for a deferred grade.

FOLK–G 599 Thesis Research (arr. cr.) This course is eligible for a deferred grade.

FOLK–G 901 Advanced Research (6 cr.) This course is eligible for a deferred grade.

FOLK–OS 500 Undistributed Overseas Study (arr. cr.)

Music Courses

FOLK–M 596 Art Music of Black Composers (3 cr.)

FOLK–T 561 Music Theory (3 cr.) (Topic: Art Musics of Asia; Art Music of India)

French and Italian

College of Arts and Sciences

Departmental E-mail: fritdept@indiana.edu

Departmental URL: www.indiana.edu/~frithome

Curriculum

Degrees Offered

Master of Arts (French Literature, French Linguistics, French Instruction, Italian), and Doctor of Philosophy (French Literature, French Linguistics, Italian)

Special Departmental Requirements

(See also general University Graduate School requirements.)

All associate instructors in French are required to take F572 and F573; all associate instructors in Italian are required to take M572 and M573.

Admission Requirements for All Programs

1. Undergraduate major in French or Italian, depending on
2. intended focus, or its equivalent;
3. Graduate Record Examination (GRE) General Test; Domestic
4. student requirement, recommended for international students;
5. Test of English as a Foreign Language (TOEFL)—international
6. students only;
7. Three letters of recommendation;
8. Statement of purpose in English and target language;
9. Official transcripts and certified English translations;
10. CV

For further details and program-specific requirements, please check the Web site (www.indiana.edu/~frithome/grads/grads.shtml) or contact the graduate secretary in the department.

Degrees in French

Master of Arts Degree—French Instruction

Course Requirements

A total of 30 credit hours, at least 20 credit hours of which must be in French, including F572, F573, F574 or F578, and F580. Additional work must include at least one course from each of the following four areas: French language, Francophone civilization, Francophone literature, and foreign language methodology/applied linguistics/second-language acquisition.

Language Proficiency Requirement

At the end of the first year of graduate study, students will be interviewed in French using a system based on the oral interview procedures developed by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. A score equivalent to “Advanced High” on the ACTFL/ETS scale is required.

Final Examination

Written examinations in the following two areas (one essay written in French): applied French linguistics and foreign language methodology/second language acquisition. Oral examination in one of the following two areas of the student’s choice: Francophone civilization or Francophone literature.

Master of Arts Degree—French Literature

Course Requirements

A total of 30 credit hours, at least 23 credit hours of which must be in French.

Language Requirement

Reading proficiency in one of the following: German, Classical Greek, Italian, Latin, Russian, or Spanish.

Final Examination

Six-hour written examination based on reading lists on three periods selected from: Middle Ages, sixteenth, seventeenth, eighteenth, nineteenth, and twentieth centuries.

Master of Arts Degree—French Linguistics

Course Requirements

A total of 30 credit hours, of which 20 must be in French, including F574 or F578, F576, F577, F579, F580, F582 and F603.

Language Requirement

Reading proficiency in a language selected from the following list: a modern Romance language other than French (Haitian Creole may count), German, Russian, Latin, or Classical Greek.

Final Examination

Written exams on three out of five areas: French phonology, French syntax, applied French linguistics, history of the French language, and pedagogy/language acquisition. To be admitted to the Ph.D. program, students must select from the first four areas above. After the written examination is passed, students desiring admission to the Ph.D. program take an oral Ph.D. admission examination.

Doctor of Philosophy Degree—French Literature

Admission Requirements

Successful completion of the curriculum and final examination constituting the department’s M.A. program in French literature. Students with an M.A. from another institution must pass the department’s M.A. examination, which may be taken near the end of the first year of study in the department or at the beginning of the second; courses taken during the first year count toward the Ph.D.

Course Requirements

A total of 90 credit hours: 65 credit hours of course work plus 25 thesis hours (F875). F564 and F603 or their equivalents are required.

Language Requirement

Reading proficiency in two outside languages. One must be German or Latin and the other chosen from the following: Catalan, Classical Greek, Italian, Russian, Portuguese, or Spanish. The language selected for the M.A. may count toward the Ph.D. requirement. Another

language may be substituted with permission of the DGS and faculty.

Minor(s)

A total of 9 to 12 credit hours each, as required by the minor department(s) or program(s).

Qualifying Examination

Oral and written exams covering six literary periods (Middle Ages, sixteenth, seventeenth, eighteenth, nineteenth, and twentieth centuries) or 5 centuries and literary criticism. Students may choose to be exempted from written exams on two of the six literary periods, provided they have achieved a grade of B or higher in two courses from each of these areas. Students may also be exempted from literary theory if they have successfully completed F564. Transfer courses may be used to qualify for exemption only if such courses have been validated by successful examination of the same literary periods on the department's M.A. exam. Examination on the minor subject is at the discretion of the minor department.

Dissertation

Ph.D. Minor in French Literature

Doctoral students from other departments may complete a minor in French literature by successfully completing no fewer than four French literature courses (12 credit hours) listed in the University Graduate School Bulletin as carrying credit toward the Ph.D., of which no more than two may be at the 400 level. In all cases, selection of the particular courses to be counted must be made in consultation with the director of graduate studies in French.

Doctor of Philosophy Degree—French Linguistics

Admission Requirements

Successful completion of the curriculum and final examination constituting the department's M.A. program in French linguistics, including oral Ph.D. admission exam. Students with an M.A. from another institution must pass the department's M.A. examination and oral Ph.D. admission exam, which may be taken near the end of the first year of study in the department or at the beginning of the second; courses taken during the first year count toward the Ph.D.

Course Requirements

A total of 90 credit hours: 65 credit hours of course work plus 25 thesis hours (F875). Students must complete at least five 600-level courses in French Linguistics excluding F603.

Language Requirement

Reading proficiency in two languages as follows: (1) German or Latin, and (2) one Romance language other than French (including Picard and Haitian Creole). The language selected for the M.A. may count toward the Ph.D. requirement. For specialists in the history of French, we highly recommend the study of both German and Latin (in addition to the Romance language).

Minor(s)

Twelve (12) credit hours of course work required in (1) general linguistics, excluding Linguistics L503, or (2) second language studies, excluding Linguistics L503.

Other minors are possible with the permission of the director of graduate studies.

Qualifying Examination

Students will take two cloistered General Exams, three hours each in length, and one Research Exam, to be completed over a period of one week with access to research materials. For the General Exams the students can select one area from Group A (Lexicology/ Lexicography, Language Contact, History of French, Sociolinguistics and Dialectology) and one area from Group B (Phonology, Morphology, Syntax, Second Language Acquisition). Selection of the examination areas will be made in consultation with the student's advisory committee.

The Research exam is designed to demonstrate that students have developed sufficient depth in a particular constellation of research questions and that they are ready to begin work on their dissertations. The area of this exam corresponds to the area of the student's projected dissertation topic and will be distinct from those of the two general exams. The particular question to be addressed, which will reflect the student's research interests, will be assigned at the beginning of the one-week period during which students write the exam.

The exams will normally be taken during the second semester of the fourth year of study. The General Exams (cloistered) may be taken in January or September; the Research Exam requirement must be satisfied during the same semester as the General Exams. Examination on the minor subject is at the discretion of the minor department.

Dissertation

Ph.D. Minor in French Linguistics

Doctoral students from other departments may complete a minor in French linguistics by successfully completing no fewer than four French linguistics courses (12 credit hours) at the 500 level or above. Doctoral students in French literature may complete a minor in French linguistics by successfully completing no fewer than three French linguistics courses (9 credit hours, 500-level courses or above) in addition to F603, for a total of 4 courses. In all cases, selection of the particular courses to be counted must be made in consultation with the director of graduate studies in French linguistics.

Degrees in Italian

Master of Arts Degree

Course Requirements

A total of 30 credit hours, of which 20 must be in Italian.

Language Requirement

Reading proficiency in one of the following: French, German, Classical Greek, Latin, Spanish.

Final Examination

Six-hour written exam based on reading list covering all periods of Italian literature.

Doctor of Philosophy Degree

Admission Requirement

Successful completion of the department's M.A. program in Italian or the equivalent. For further details, contact the graduate secretary in the department.

Course Requirements

A total of 90 credit hours. 65 credit hours of course work plus 25 thesis hours (M875).

Language Requirement

Reading proficiency in two of the following: French, German, Classical Greek, Latin, Spanish. One of the languages chosen must be French, German, or Latin, according to the dissertation topic. The language selected for the M.A. may count toward the Ph.D. requirement.

Minor(s)

A total of 9 to 12 credit hours each, as required by the minor department(s) or program(s).

Qualifying Examination

Two written Ph.D. exams which cover the following major literary periods:
1) Medieval, Renaissance and Baroque (from 1200 to 1600), 6 hours in length;
2) Modern and Contemporary (from 1700 to the present, including cinema), 7 hours in length.

Dissertation

Ph.D. Minor in Italian

Doctoral students from other departments may complete a minor in Italian by successfully completing no fewer than four Italian courses (12 credit hours) listed in this bulletin as carrying graduate credit. Selection of the particular courses to be counted must be made in consultation with the director of graduate studies in Italian.

Faculty

Chairperson

Professor Emanuel Mickel*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Rudy Professor of French and Italian

Albert Valdman* (Emeritus, Linguistics)

Professors

Michael L. Berkvam* (Emeritus), Richard Carr* (Emeritus), Gilbert Chaitin* (Emeritus, Comparative Literature), Andrea Ciccarelli*, Eileen Julien* (Comparative Literature, African American and African Diaspora Studies), Edoardo Lèbano* (Emeritus), Eric M. MacPhail*, Jacques Emile Merceron*, Emanuel J. Mickel*, Samuel Rosenberg* (Emeritus), Sonya Stephens*, H. Wayne Storey*, Antonio Vitti*

Associate Professors

Guillaume Ansart*, Julie Auger*, Laurent Pierre Dekydtspotter*, Margaret E. Gray*, Mona Houston* (Emerita), Russell Pfohl* (Emeritus), Kevin Rottet*, Colleen Ryan-Scheutz*, Massimo Scalabrini*, Barbara S. Vance*

Assistant Professors

Marco Arnaudo*, Hall Bjørnstad, Oana Panaïté, Nicolas Valazza

Directors of Graduate Studies

Associate Professor Julie Auger* (French Linguistics), Ballantine Hall 635, (812) 855-7293

Assistant Professor Oana Panaïté (French Literature), Ballantine Hall 627, (812) 855-1134

Assistant Professor Marco Arnaudo* (Italian), Ballantine Hall 633, (812) 855-7812

Courses

Graduate

GRAD–G 611 Romance Linguistics I (3 cr.)

GRAD–G 901 Advanced Research (6 cr.)

French

FRIT–F 401 Structure and Development of French (3 cr.)

FRIT–F 410 French Literature of the Middle Ages (3 cr.) Not open to M.A. or Ph.D. candidates in French.

FRIT–F 413 French Renaissance (3 cr.)

FRIT–F 423 Seventeenth-Century French Literature (3 cr.)

FRIT–F 424 Ideas and Culture in Seventeenth-Century France (3 cr.)

FRIT–F 435 Enlightenment Narrative (3 cr.)

FRIT–F 436 Voltaire, Diderot, and Rousseau (3 cr.)

FRIT–F 443 Great Novels of the Nineteenth Century (3 cr.)

FRIT–F 445 Nineteenth-Century Drama (3 cr.)

FRIT–F 446 Great Poetry of the Nineteenth Century (3 cr.)

FRIT–F 450 Colloquium in French Studies—Traditions and Ideas (3 cr.)

FRIT–F 453 Le Roman au XXe siècle I (3 cr.)

FRIT–F 454 Le Roman au XXe siècle II (3 cr.)

FRIT–F 461 La France contemporaine: Cinema et Culture (3 cr.)

FRIT–F 463 Civilisation française I (3 cr.)

FRIT–F 464 Civilisation française II (3 cr.)

FRIT–F 474 Thème et version (2 cr.)

FRIT–F 475 Le Français Oral: Cours Avancé (2 cr.)

FRIT–F 501 Medieval French Literature I (3 cr.) Introductory survey; all texts read in original language; no previous knowledge of Old French required.

FRIT–F 502 Medieval French Literature II (3 cr.) P: F501 or equivalent. Introductory survey; all texts read in original language; no previous knowledge of Old French required.

FRIT–F 503 Reading Old French (1 cr.) P: F501 Oral translation of Old French texts and elucidation of textual and grammatical difficulties.

FRIT–F 505 Middle French Literature (3 cr.) Representative works of fourteenth and fifteenth centuries; each semester focuses on a particular writer or genre.

FRIT–F 507 Foreign Language Institute (1–6 cr.)

FRIT–F 510 Foreign Study in French (2–8 cr.) Formal study in a French university; language, literature, and culture of France. Credit to apply only to the M.A. in French Instruction degree. Program must be approved by department.

FRIT–F 513 French Renaissance Prose (3 cr.) Prose works from sixteenth-century France including letters, essays, novels, short stories, Bible translations, travel accounts, political treatises, and philosophical dialogues by authors famous and obscure, humorous and solemn, terse and prolix. Also includes review of lexical and grammatical peculiarities of sixteenth-century French and typographic conventions of Renaissance printed books.

FRIT–F 514 French Renaissance Poetry (3 cr.) French lyric poetry of the sixteenth century from the Rhétoriqueurs to Agrippa d'Aubigné. Late medieval fixed forms and the chanson, sonnet, ode, and metrical experiment of vers mesurés. Formal analysis and situation of texts in their intellectual and historical contexts. Study of poetic manifestos of the Pléiade and their rivals.

FRIT–F 520 Advanced French Phonetics (3 cr.) General introduction to French phonetics and phonemics; training in the evaluation of pronunciation accuracy and the teaching of French pronunciation at the secondary school and university level; remedial practice.

FRIT–F 523 French Seventeenth-Century Literature and Culture (3 cr.) Questions concerning seventeenth-century France as treated in literature, philosophy, moralist teachings, science, and les beaux arts.

FRIT–F 535 Le XVIIIe siècle: l'Essai (3 cr.) Introduction to one of the two major genres of the Enlightenment, broadly defined and exemplified by writers like Montesquieu, Voltaire, Diderot, and Rousseau.

FRIT–F 536 Le Roman au XVIIIe siècle (3 cr.) Introduction to the study of the French novel in the eighteenth century with special emphasis on three major genres of the period: the memoir-novel, the epistolary novel, and the philosophical novel.

FRIT–F 540 La Poésie au XIXe siècle I (3 cr.) From early Romanticism through Baudelaire.

FRIT–F 541 La Poésie au XIXe siècle II (3 cr.) Parnassian and Symbolist poets.

FRIT–F 545 Le Roman au XIXe siècle I (3 cr.)

FRIT–F 546 Le Roman au XIXe siècle II (3 cr.)

FRIT–F 548 La Pensée française au XIXe siècle I (3 cr.) Philosophers, historians, social critics, and religious writers, such as Chateaubriand, Michelet, Taine, Renan.

FRIT–F 552 La Poésie au XXe siècle I (3 cr.) Panorama: poets such as Cendrars, Apollinaire, Valéry, Claudel, les surréalistes, Saint-John Perse, Ponge, Michaux.

FRIT–F 553 La Poésie au XXe siècle II (3 cr.) Concentration on one or several authors; a school, e.g., surrealism; certain formal aspects.

FRIT–F 555 Le Roman au XXe siècle I (3 cr.) Representative French and Francophone novels from 1900 to 1940. Novelists such as Proust, Gide, Colette, Celine, Bernanos, Sartre.

FRIT–F 556 Le Roman au XXe siècle II (3 cr.) The novel after 1940.

FRIT–F 557 Le Théâtre au XXe siècle (3 cr.) Jarry, Cocteau, Apollinaire, Claudel. Surrealism and theatre of the absurd: Vitrac, Ionesco, Adamov, Beckett, Genet, Arrabal, Artaud.

FRIT–F 559 L'Essai au XXe siècle (3 cr.) Important essays of the twentieth century, technical philosophy excluded. Authors such as Bergson, Valéry, Sartre, Camus, Weil, Artaud, Lyotard.

FRIT–F 561 Studies in French Civilization (3 cr.) Content varies. May include historical survey of the development of French civilization since the revolution, taking into consideration sociopolitical history, history of ideas, fine arts, literature. Field of study may be extended to the French-speaking world. May be repeated twice for credit.

FRIT–F 563 Introduction to Graduate Study and Research (1 cr.) S/F grading

FRIT–F 564 Issues in Literary Theory (3 cr.) Important issues and methods of literary study, such as catharsis, genre, meaning, periodization, representation, rhetoric, and vraisemblance, studied in an historical perspective.

FRIT–F 565 Introduction to French Linguistics (3 cr.) Introduction to the structure of the French language: phonology, morphology, and syntax.

FRIT–F 572 Practicum in College French Teaching (1 cr.) Focused classroom observations followed by discussions; identification and evaluation of teaching techniques. Required of new associate instructors; offered only in fall semester.

FRIT–F 573 Methods of College French Teaching (3 cr.) Theoretical notions underlying current approaches; testing; evaluation of teacher performance and instructional materials. Required of all associate instructors; offered only in spring semester.

FRIT–F 574 Thème et version: cours avancé (3 cr.) Translation of contemporary texts from English into French, occasionally from French into English. Emphasis on problems of literary styles.

FRIT–F 576 Introduction to French Phonology (3 cr.) Study of French phonology and the phonology/morphology interface within the framework of recent linguistic models,

including solutions to major descriptive problems proposed from the early twentieth century to the present.

FRIT–F 577 Introduction to French Syntax (3 cr.) Study of French syntax and the syntax/semantics interface within the framework of recent linguistic models.

FRIT–F 578 Contrastive Study of French and English (3 cr.) Advanced contrastive study of written French and English, with emphasis on problems of interference. Readings, exercises.

FRIT–F 579 Introduction to French Morphology (3 cr.) Introduction to word formation in French, including inflection, derivation, and compounding.

FRIT–F 580 Applied French Linguistics (3 cr.) Introduction to the lexical, phonological, morphological, and syntactic structure of French from a pedagogical perspective. Presentation of the several types of variation in the French language worldwide and linguistic diversity in France.

FRIT–F 582 Introduction to French Semantics (3 cr.) Introduction to issues in the interpretation of French. Focusing on the interpretation of various constructions of French, the course investigates semantic representations in the verbal and nominal domains. The goal is to comprehend how speakers of French develop these precise semantic intuitions.

FRIT–F 584 Stylistics and Semantics (3 cr.) Relations between types of interpretation and stylistic factors. Ludic-esthetic (including literary) uses of words versus cognitive-moral uses. Emphasis on the former; genre divisions; analysis of texts focused on basic problems of interpretive decision.

FRIT–F 603 History of the French Language I (3 cr.) Consideration of all aspects of the subject; concentration on internal development (phonology, morphology, syntax) from Latin to modern French. First semester offers an overview; second semester, intensive study of selected aspects of internal evolution. Knowledge of Latin useful.

FRIT–F 604 History of the French Language II (3 cr.) P: F603 or equivalent. Consideration of all aspects of the subject; concentration on internal development (phonology, morphology, syntax) from Latin to modern French. First semester offers an overview; second semester, intensive study of selected aspects of internal evolution. Knowledge of Latin useful.

FRIT–F 605 History of French Prose Style (3 cr.) Philological and literary study of major figures and trends in prose style from late Middle Ages to the present. Ciceronianism, style coupé, oratorical styles, écriture artiste, etc.

FRIT–F 615 Studies in Medieval French Literature (3 cr.) P: Knowledge of Old French. Intensive study of one writer, work, theme, or genre, such as Chrétien de Troyes, the Roman de la rose, lyric poetry. May be repeated twice for credit.

FRIT–F 620 Studies in Sixteenth-Century French Literature (3 cr.) Intensive study of a writer, genre, or aspect of the century, such as Rabelais, Montaigne, poetry, humanism.

FRIT–F 630 Studies in Seventeenth Century French Literature (3 cr.) Intensive study of one writer, work, or theme, such as Racine, Corneille, Moliere, Baroque poetry.

FRIT–F 635 Studies in Eighteenth-Century French Literature (3 cr.) Intensive study of one theme, genre, or author, such as cultural otherness, theatre, Diderot, Rousseau.

FRIT–F 640 Studies in Nineteenth-Century French Literature (3 cr.) Intensive study of one theme, genre, or author, such as cultural otherness, theatre, Diderot, Rousseau.

FRIT–F 647 Contemporary French Theory and Criticism (3 cr.) P: F564. Recent movements and concepts in French theory influential in determining current practice in literary study. Structuralism, psychoanalysis, neo-Marxism, intertextuality, deconstruction.

FRIT–F 650 Etudes de littérature contemporaine (3 cr.) Intensive study of one writer, work, or theme, such as Céline, literary manifestos, Proust, colonialism, or existentialism.

FRIT–F 667 Studies in Francophone Literature (3 cr.) Intensive study of one writer, work, genre, or theme in French language literature produced outside of France or by immigrant writers in France. Examples of topics are Aimé Césaire, Senegalese film, post-colonial theory, créolité.

FRIT–F 670 Advanced French Phonology (3 cr.) Advanced phonological analysis of issues in French phonology, emphasizing recently proposed linguistic models.

FRIT–F 671 Advanced French Syntax (3 cr.) Advanced syntactic and semantic description of French, emphasizing recently proposed linguistic models.

FRIT–F 672 French Dialectology (3 cr.) Geographical and social variation in French; traditional and modern dialectology, oil dialects and North American varieties of French, languages in contact, norm(s), variationist studies.

FRIT–F 673 Topics in the Learning and Teaching of French (3 cr.) P: F580 or equivalent. Survey of major issues in the learning and teaching of French and discussion of how these issues and research results bear on approaches to second-language teaching. Designed for prospective teachers of French and students interested in second-language acquisition and classroom research.

FRIT–F 675 Studies in French Linguistics (3 cr.) Content varies. May include general or intensive study in syntax, semantics, lexicography, or other linguistic topics

FRIT–F 676 Structure and Sociolinguistic Aspects of Haitian Creole and Haitian French (3 cr.) Description of the phonological, morphosyntactic, and lexical structure of Haitian Creole and comparison with Haitian French. Review of the linguistic situation of Haiti, including the respective functions of Creole and French and attitudes and values associated with each language.

FRIT–F 677 French Lexicology and Lexicography (3 cr.) P: F580 or equivalent. Study of the structure of the French lexicon. Examination of the process of dictionary compilation and evaluation. Hands-on experience in

the use of computer technology for lexicographic and lexicological tasks such as the compilation of databases, use of the optic scanner, and automatic text analysis.

FRIT–F 678 Advanced French Morphology (3 cr.) P: F579 or permission of instructor. Advanced study of the word structure in French from a variety of theoretical perspectives.

FRIT–F 679 French-Based Pidgins and Creoles (3 cr.) Study of the contact languages known as pidgins and creoles, focusing on those which are French-based. Topics include an overview of the history of the field; how the terms pidgin and creole are defined and used; theories of origin; the sociohistorical setting of creolization; stages of development; key linguistic structures.

FRIT–F 680 Bilingualism and Language Contact in Francophonie (3 cr.) Examines the various linguistic and social phenomena arising when two or more languages are in (prolonged or intense) contact, including borrowing and grammatical replication; codeswitching; language maintenance, shift and death; pidginization and creolization; language intertwining and mixed languages, sprachbunds and convergence; and koineization.

FRIT–F 810 Individual Readings in French and Francophone Civilization (1–6 cr.)

FRIT–F 815 Individual Readings in French Literature and Linguistics (1–6 cr.)

FRIT–F 825 Seminar in French Literature (3 cr.) Intensive study of a topic involving more than one period of French literature.

FRIT–F 875 Research in French Literature and Language (1–12 cr.)

Italian

FRIT–M 500 Seminar in Italian Cinema (3 cr.) Intensive study of one director, genre, or period in Italian cinema.

FRIT–M 501 Dante I (3 cr.) Seminar on Dante's Divine Comedy.

FRIT–M 502 Dante II (3 cr.) Seminar on Dante's works and times.

FRIT–M 503 Medieval Italian Literature and Culture (3 cr.) Class may be taught as a survey course or may focus on any author, period, genre, or cultural theme from the "Scoula Siciliana" to Petrarch.

FRIT–M 504 Renaissance Italian Literature and Culture (3 cr.) Class may be taught as a survey course or may focus on any author, period, genre, or cultural theme from Petrarch to the late 1600s.

FRIT–M 505 Modern Italian Literature and Culture (3 cr.) Class may be taught as a survey course or may focus on any author, period, genre, or cultural theme from the Enlightenment to Modernism.

FRIT–M 511 History of the Italian Language (3 cr.)

FRIT–M 513 History of the Italian Language (3 cr.) Survey or specific course on the Italian epic tradition from Pulci to Tasso.

FRIT–M 550 Seminar in Italian Poetry (3 cr.) Class may focus on any aspect of Italian lyric tradition from the origins to present.

FRIT–M 553 The Italian Novel (3 cr.) Survey course on the major Italian novelists from 1600s to present time. Class may also function as a seminar focusing on specific issues of the novelistic genre in Italy.

FRIT–M 554 Modern Italian Theatre (3 cr.) Class may be taught as a survey course on Italian theatre from Goldoni to present time, or may focus on specific authors or periods of modernity.

FRIT–M 564 Twentieth Century Poetry (3 cr.) Major developments in contemporary Italian poetry.

FRIT–M 565 Readings in the Italian Cinema (3 cr.) Analysis of specific movements, topics, or directions in Italian cinema. Attendance of film showings required. Subject may vary with each listing and is identified in the Schedule of Classes.

FRIT–M 572 Italian Teaching Practicum (3 cr.) Instructors of Italian develop, practice, and evaluate the effectiveness of pedagogical approaches and materials. They create and discuss a variety of assessments for evaluating language skills and cultural knowledge.

FRIT–M 573 Methods of Italian Language Teaching (3 cr.) Examines current trends, issues, and practices in foreign language teaching with a focus on Italian. Students engage with scholarly articles to explore and evaluate classroom methods. Includes the study of critical thinking, multiple intelligences, teaching literature, an introduction to applied linguistics, teaching as performance, and professional development for Italian teachers.

FRIT–M 603 Seminar in Medieval Italian Literature (3 cr.) Intensive study of one writer, work, theme, or genre in the medieval period. May be repeated for credit with consent of the graduate advisor.

FRIT–M 604 Seminar in Renaissance Italian Literature (3 cr.) Intensive study of one writer, work, theme, or genre of the Renaissance.

FRIT–M 605 Seminar in Modern Italian Literature (3 cr.) Intensive study of one writer, work, theme, or genre in the modern era.

FRIT–M 625 The Concept of Justice in Italian Literature (3 cr.) Focuses on major authors in Italian literature, their concept of justice, and its relation to aesthetic development.

FRIT–M 815 Individual Readings in Italian Literature (1–6 cr.)

FRIT–M 825 Seminar in Italian Literature and Culture (1–6 cr.) Course content varies; may include literary theme, major author, literary movement, cinema, or cultural topic. Offered regularly. May be repeated for credit with permission of the graduate advisor.

FRIT–M 875 Research in Italian Literature (1–12 cr.)

Courses for Graduate Reading Knowledge

FRIT–F 491 Elementary French for Graduate Students (3–no grad. cr.)

FRIT–F 492 Readings in French for Graduate Students (3–no grad. cr.)

FRIT–FM 491 Elementary Italian for Graduate Students (3–no grad. cr.)

FRIT–M 492 Readings in Italian for Graduate Students (3–no grad. cr.)

Gender Studies

College of Arts and Sciences
Departmental E-mail: gender@indiana.edu

Departmental URL: www.indiana.edu/~gender/

Curriculum

Gender Studies examines the social processes, cultural representation , relations of power, and forms of knowledge that generate an array of gendered perspectives and experiences worldwide. A focus on gender as an analytic category facilitates an array of scholarly collaborations, reflecting new theoretical and methodological developments in diverse fields such as the social sciences, the arts and humanities, the natural sciences, and policy studies. Categories of difference that articulate with gender—such as race, ethnicity, class, and religion—are vertical grids of attention throughout the doctoral degree program.
The Department emphasizes integrative and transdisciplinary modes of analysis for the study of sexualities and sexual identities, bodies and their technologization and medicalization, representation and social/cultural production, and feminist epistemologies.

Three unique core courses form the heart of the program: G600 Concepts of Gender, G603 Contemporary Debates in Feminist Theory, G702 Researching Gender Issues.

Areas of Concentration

In addition, students select one of three areas of concentration:

- Medicine, Science, and Technologies of the Body
- Sexualities, Desires, Identities
- Cultural Representations and Media Practices

Note that these concentrations are flexible and overlapping to some extent. Students may change their area of concentration as they move through the program.

Special Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree

Admission Requirements

- Applicants for graduate admission must hold baccalaureate degrees from accredited four-year collegiate institutions.
- For graduate admission the College requires a cumulative undergraduate GPA of 3.0 or higher.
- We require the Graduate Record Examinations (GRE) be taken in the past five years. We prefer a score of 600 or higher on either the verbal or quantitative sections of the examination and a 5.0 on the Analytical Writing assessment. Furthermore, we expect a minimum total score of 1150 (Quantitative and Verbal scores added together). The institution code for Indiana University is 1324. All applicants must ask ETS to forward GRE scores to IU using this code.
- For applicants whose native language is not English, the College and the University Graduate School require proof of proficiency in reading, writing, speaking, and understanding English. In almost all cases proficiency should be demonstrated by achieving a score of 213 or higher on the Test of English as a Foreign Language (TOEFL).

Course Requirements

Students will complete at least 60 credit hours of course work, which includes 9 credit hours of core courses, 15 credit hours in a chosen area of concentration, and a 12 credit hour graduate minor (taken either in another department or designed on an intra- or interdepartmental basis). Note that elective courses in one's area of concentration may be taken outside the Department of Gender Studies. A maximum of 30 credits may be transferred from graduate work completed at another university, provided the Director of Graduate Studies approves the course content.

Only those students intending to pursue the Ph.D. will be admitted to the program. However, a Master's degree may be obtained upon satisfactory completion of its requirements, which are: three required core courses for the doctorate; a minimum of nine additional credit hours in GNDR, including two 3 cr. courses at the 600 level and one 3 cr. course at the 700 level; and up to 12 credit hours of approved elective courses outside Gender Studies. A total of 30 credit hours of course work is required to obtain the Master's degree.

Foreign Language Requirement

Gender Studies does not require a foreign language for all students. However, if a candidate is engaged in transnational gender scholarship, a foreign language may be formally required. The DGS will determine the means by which proficiency will be demonstrated.

Research Skills

Beyond the required core course G702 Researching Gender Issues, there is no specific research-related skill requirement. However, a student's advisor may require additional competency in (a) research skill(s) appropriate to that student's dissertation topic. Such requirements may include competency in a second language, statistical methods, questionnaire development, ethnographic methods, interviewing techniques, textual or media analysis, computing/internet/webmaster operations, specific laboratory skills, other research and technical skills, or appropriate combinations of any of these. These studies are to be undertaken early in the candidate's graduate career. The assessment and completion of any required research competencies normally must be certified by the DGS prior to admission to candidacy.

Additional Requirements after Admission with Master's Degree

Candidates admitted with a master's degree from another institution may be required to take additional preparatory work, depending on their background and training. The

program will be decided in consultation with the student's faculty advisor and the DGS.

Qualifying Examination and the Dissertation Defense

Qualifying examinations (both written and oral) are to be taken approximately 8 months after the completion of course work. Upon successful completion of the qualifying examination and presentation of a satisfactory dissertation proposal, the student will be nominated to candidacy for the Ph.D. The Dissertation Committee, which must be approved by the Dean of the Graduate School, will be responsible for directing and evaluating the thesis. The dissertation defense serves as the final oral examination and will cover topics related to the dissertation and area of specialization.

Ph.D. Minor in Gender Studies

Course Requirements

A Ph.D. Minor in Gender Studies requires at least 12 credit hours of GNDR courses, which may include courses that are joint-listed with other departments. At least 1 of these courses must be chosen from the following: G600, G603, G702. Students may petition for no more than 1 non-GNDR course to count towards the minor; the Director of Graduate Studies must deem such a course to have significant Gender Studies content. A maximum of 3 credits may be transferred from graduate work completed at another university, provided the Director of Graduate Studies approves the course content. Plans for the minor must be made in consultation with the Director of Graduate Studies.

Grades

Only grades of B (3.0) and above will count for credit.

Examination

None required. A Gender Studies faculty member may be invited to attend the student's oral qualifying examination.

Faculty

Chairperson

Karma Lochrie*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Martha C. Kraft Professor of Humanities

Fedwa Malti-Douglas*

Director of Graduate Studies

Alexander M. Doty*

Founding Professor

M. Jeanne Peterson* (Emerita, History)

Professors

Judith A. Allen* (History), Alexander M. Doty* (Communication and Culture), Fedwa Malti-Douglas* (Comparative Literature; Adjunct, Law), Stephanie A. Sanders* (The Kinsey Institute), Suzanna D. Walters*, Richard R. Wilk* (Anthropology)

Associate Professors

Lessie Jo Frazier* (Adjunct, History), Sara Friedman* (Anthropology), LaMonda Horton-Stallings (African-American and African Diaspora Studies), Susan Stryker*, Brenda R. Weber* (Adjunct, American Studies, Cultural Studies, English)

Assistant Professors

Marlon Bailey* (African American and African Diaspora Studies), Colin R. Johnson* (Adjunct, American Studies, History, Human Biology)

Senior Lecturer

Jennifer E. Maher

Affiliated Graduate Faculty

Professors

Wendy Gamber* (History), Susan Gubar* (English), Ellen D. Ketterson* (Biology), Karma Lochrie* (English), Alyce Miller* (English), Brian Powell* (Sociology), Jean C. Robinson* (Political Science), Susan Hoffman Williams* (School of Law), William L. Yarber* (Applied Health Science, Rural Center for AIDS/STD Prevention)

Associate Professors

Purnima Bose* (English), Claudia L. Breger* (Germanic Studies), Maria Bucur-Deckard* (History), Lynn Duggan (School of Social Work), Mary Favret* (English), Jennifer Fleissner* (English), Patricia C. Ingham* (English), Stephanie C. Kane* (Criminal Justice), Sarah Phillips* (Anthropology), Colleen Ryan-Scheutz* (French and Italian), Susan Seizer* (Communication and Culture), Margaret "Peg" Sutton* (Education), Deborah Widiss (Law)

Assistant Professors

Penelope Anderson (English), Beth Buggenhagen (Anthropology), Mary L. Gray* (Communication and Culture), Terrell Scott Herring* (English), Marissa J. Moorman* (History), Amrita Myers* (History), Julia Roos (History), Micol Seigel (African-American and African Diaspora Studies), Beate Sissenich (Political Science), Kirsten Sword (History), Shane Vogel* (English)

Academic Advisor

Alexander Doty*, Memorial Hall East M014, (812) 856-4679

Courses

Description of Core Required Courses

GNDR–G 600 Concepts of Gender (3 cr.) Introduces historical, theoretical, behavioral, philosophical, scientific, multi- and cross-cultural perspectives on gender and its meanings. Attention is given to the emergence of the category "gender" itself, and its variable applications to different fields of knowledge, experience, cultural expression, and institutional regulation, including queer, trans, and other theories of sex, sexuality, and desire.

GNDR–G 603 Feminist Theories (3 cr.) Explores classic and current feminist theories, asking questions about knowledge, subjectivity, sexuality, and ethics. Debates are situated within and against various intellectual movements, such as Marxism, post-structuralism, theories

of race and ethnicity. Sexuality studies and queer theory's relation to feminist praxis will form a key component of the course.

GNDR–G 702 Researching Gender Issues (3 cr.) This course explores research methodologies and methods in history that are relevant to gender studies. The impact of gender studies on epistemological and methodological issues in history is examined. The course provides students with an overview of research tools, methods, techniques, approaches, paradigms, and theoretical contributions pertinent to gender-related historical research.

Description of Additional Gender Studies Courses

GNDR–G 598 Feminist Theory: Classic Texts and Founding Debates (3 cr.) Explores founding texts of contemporary feminist theory, asking questions about identity, knowledge, sexuality, and ethics. Such works have emerged in relation to a variety of theoretical discourses, such as Marxism, structuralism, cultural studies, and others. Examines the intellectual history of feminist theory and its resonance with more recent trends.

GNDR–G 601 Scientific Practices and Feminist Knowledge (3 cr.) Examines intersections of gender and knowledge focusing on feminist analyses of scientific epistemology and practice, and the implications of feminist theories about the social meaning and gendered construction of scientific research. Particular focus is placed upon race, class, sexuality and cultural difference in medical, psychological, and evolutionary accounts of "human nature."

GNDR–G 602 Gender Dimensions of Cultural Production and Criticism (3 cr.) Interrogates the gendered nature of cultural production and criticism. Controversies related to gender dimensions of aesthetics, cultural meanings, or genres receive examination, as well as claims about the constitution of genius or creativity, and the role of identity and race in cultural production. The critical issue of theorizing audience/reader/viewer warrant particular scrutiny.

GNDR–G 604 Knowledge, Gender, and Truth (3 cr.) Examines feminist contributions to epistemological questioning of knowledge formations through comparison of case study disciplines and through cross-cultural study. Arguments about knowledge values of "truth," "objectivity," "validity," "reason," and "representativeness" as gendered categories. Receive scrutiny in relation to fields such as historiography, ethnography, ethics, science, or psychology.

GNDR–G 695 Graduate Readings and Research in Gender Studies (1–6 cr.) This course provides for graduate students' intensive independent study of specific topics. Study is supervised by an appropriate core or affiliated faculty member whose research expertise matches the student's area of interest.

GNDR–G 696 Research Colloquium in Gender Studies (1–3 cr.) Active participation in Gender Studies research colloquia. Introduces students to the problems, interpretations, theories and research trends in all areas related to gender and sexuality studies. Topics vary throughout the semester. Facilitates exposure to a variety of approaches to interrogating research questions about gender. May be repeated more than once for credit.

GNDR–G 700 Sexualized Genders/Gendered Sexualities (3 cr.) Expands our understanding of the relationship between biological sex, gendered identities, and sexual "preferences," practices and lifeways that push beyond binary models reliant on a simple "nature/culture" distinction. Focus is placed on the dynamic and variable aspects of sex, sexuality, and gender within and across cultures and historical periods.

GNDR–G 701 Graduate Topics in Gender Studies (1–4 cr.) Advanced investigation of selected research topics in women's studies. Topics to be announced.

GNDR–G 704 Cultural Politics of Sexuality in the Twentieth Century (3 cr.) Examines the cultural and political implications of sexuality's emergence as a public discourse during the twentieth century. Specifically, it examines certain limit cases in which the ostensibly private matters of sexual behavior and sexual identity have given rise to very public controversies about the cultural and political values of society at large.

GNDR–G 708 Contested Masculinities (3 cr.) This course examines masculinity at sites of contestation–between disciplines, historical moments, nationalities, regions, and bodily ontologies. By tracing the resonances of transnational, transdisciplinary, and transhistorical masculinities, our aim is to critically examine masculinities, particularly in the context of feminist challenges to gender ideologies.

GNDR–G 710 Gender, Medicine, and the Body (3 cr.) Examines topical themes related to medicine and the body as they interact with gender.

GNDR–G 718 Transnational Feminisms and the Politics of Globalization (3 cr.) Interrogates debates concerning globalization and gender. Focuses on how gender shapes and is shaped by the flow of money, people, and culture that characterize "globalization." How is gender influenced by geographic dislocations and re-routings? How are women and men situated as agents and subjects of global change?

GNDR–G 899 Ph.D. Dissertation (1–12 cr.) Research and writing of doctoral dissertation. This course is eligible for a deferred grade.

General Science

Interdepartmental Graduate Committee on General Science

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professor Robert Sherwood* (Education), Director; Associate Professor John Carini * (Physics); Clinical Associate Professor Cathrine Reck (Chemistry); Professor Albert Ruesink* (Biology)

Graduate Advisor

Professor Robert Sherwood*, Wright Education Building 3054, (812) 856-8154

Degree Offered
Master of Arts for Teachers

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Bachelor's degree with 35 credit hours in science or in science and mathematics. It should be understood that the program of study for this degree is not designed to allow one to continue for the Ph.D. degree.

Course Requirements

Sixty-five (65) credit hours in science and mathematics (counting courses taken as an undergraduate) to include:

1. 35 credit hours in the physical sciences, distributed as follows: astronomy (3 credit hours), chemistry (10 credit hours), geology (6 credit hours), physics (10 credit hours), and electives (6 credit hours);
2. 25 credit hours in the biological sciences, distributed as follows: plant sciences (10 credit hours), microbiology (5 credit hours), and zoology (10 credit hours). Certain general biology courses may count toward this requirement (see below); and
3. 5 credit hours in mathematics or computer science.

At least 36 credit hours are required beyond the bachelor's degree, including 26 credit hours in the above-named sciences, mathematics, or computer science, the remaining 10 credit hours in science, mathematics, or education.

These minimum requirements are to be met by selecting from the following courses; an advisor in the program should be consulted regarding the acceptability of other courses.

1. Physical Sciences Astronomy: A100, A105, A221, A222, A451, A452, Chemistry: C101 and C121, C117, C118, C243, R340, C341, C342, C343, C344, C360 Geological Sciences: G111, G112, G221, G222, G334, G404 Physics: P201-P202 (or P221-P222), P301, P309, P310, P314, P317, P321, P331, P340, P350, P460
2. Biological Sciences General Biology: L111, L112, L113, L211, L311, L312, L313, L318, L319, L323 Microbiology: M250, M255 Plant Sciences: B300, B351, B352, B364, B371, B373 Zoology: Z373, Z374, Z375, Z406, Z466
3. Mathematics and Computer Science: Mathematics: M212; Computer Science: A201

Other 300– and 400–level science courses must be approved by your advisor.

Grades

B (3.0) average or higher; at least B in science courses.

Certification Requirements

All students seeking the M.A.T. degree must be eligible for certification to teach at the middle school or high school level in Indiana or another state.

Geography

College of Arts and Sciences
Departmental E-mail: geog@indiana.edu

Departmental URL: www.indiana.edu/~geog

Apply electronically for admission:
www.gradapp.indiana.edu/

Curriculum

Degrees Offered
Master of Arts, Master of Arts for Teachers, Master of Arts in Geography and Master of Science in Environmental Science (SPEA), Master of Science, Master of Science in Geography and Master of Science in Environmental Science (SPEA), and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Grades

B (3.0) average or higher; B in core courses.

Master of Arts Degree
Admission Requirements

Undergraduate major in geography or its equivalent. Applicants not meeting this requirement may be expected to take additional work.

Fields of Study

Human-Environment Interaction, Human Geography, and Sustainable Systems. For subfields available see section about doctoral study.

Course Requirements

A minimum of 30 credit hours, including a core curriculum consisting of G500, G501, and G588. In addition, each student should select one topical field of concentration and complete a sequence of courses involving a minimum of 9 graduate credits in that field.

Thesis or Research Papers

Students have the option of writing a thesis (G850) or two research papers (G845). Up to 6 credit hours are allowed for a thesis and up to 3 credit hours are given for each research paper.

Final Examination

Oral examination covering the topic of specialization, the thesis or research papers, and other aspects of geography.

Master of Science Degree
Admissions Requirement

Undergraduate major in geography, atmospheric science, mathematics, physics, chemistry, biology, or equivalent. Applicants not meeting this requirement may be expected to take additional work.

Fields of Study

Atmospheric Science, Geographic Information Science, and Sustainable Systems.

Course Requirements

A minimum of 30 credit hours, including a core curriculum consisting of G500, G501, and G588. In addition, each student should select a topical field of concentration in either atmospheric science or geographic information science and complete a minimum of 9 graduate credits in that field.

Thesis or Research Papers

Students have the option of writing a thesis (G850) or two research papers (G845). Up to 6 credit hours are allowed for a thesis and up to 3 credit hours are given for each research paper.

Master of Arts for Teachers Degree

Admission Requirements

A full undergraduate major in geography is not required, but applicants should have had introductory courses in physical, environmental, or human geography.

Program

An individual program of study will be arranged for each student. A general description of the M.A.T. requirements is found elsewhere in this bulletin.

Master of Arts/Master of Science in Geography and Master of Science in Environmental Science (Public and Environmental Affairs)

Admission Requirements

The Department of Geography and the School of Public and Environmental Affairs (SPEA) offer a three-year, 60 credit hour program that qualifies students for two master's degrees. A student must apply to and be accepted by the School of Public and Environmental Affairs for study toward the Master of Science in Environmental Science (M.S.E.S.) and by the Department of Geography and the Graduate School for study toward the M.A. or M.S. degree. The student must select an advisory committee of at least three faculty members representing both the Department of Geography and SPEA.

Course Requirements

A minimum of 60 credit hours, distributed as specified among the following six areas in environmental science and geography: (1) environmental sciences (12 cr.); (2) environmental management and policy (10 cr.); (3) environmental science electives (6-9 cr.); (4) geography (13 cr.) including core curriculum, G500, G501, and G588, and one 3-credit seminar; (5) geography electives (11 cr.); and (6) research (6 cr.).

Research Project, Thesis, or Research Papers

Students may opt for a research project, a thesis, or two research papers. They may complete up to 6 credit hours (of the 60 required) of area 6 (research) in SPEA E625 for a research project; GEOG G850 for a thesis; or G845 if choosing the option of two research papers. The research report, thesis, or research papers must be acceptable to the student's advisory committee, the director of graduate studies in geography, and the director of the M.S.E.S. program.

Doctor of Philosophy Degree

Admission Requirements

M.A. or M.S. degree in geography or related discipline.

Fields of Study

Atmospheric Science, Human-Environment Interaction, Human Geography, Geographic Information Science, and Sustainable Systems. Within these broad fields, students may develop research specializations in subfields. In Atmospheric Science, general fields of active research include air pollution meteorology, micro- and boundary-layer meteorology, climatic change, and statistical climatology. Within Human-Environment Interaction, the primary areas of research include human dimensions of environmental change, resource management and sustainability, land-change science, and cultural and political ecology. In Geographic Information Science (GIS), particular emphasis is placed on the application of GIS, remote sensing, and statistical and numerical modeling. In Human Geography, areas of particular focus are development, location analysis, population, migration and labor markets, and landscape studies.

Course Requirements

A minimum of 90 credit hours, including a core curriculum consisting of G500, G501, and G588 as well as a dissertation (up to 20 credit hours). Each student must select a major within the field of geography chosen from the fields of study listed above. Students must complete a minimum of 12 credit hours beyond the M.A./M.S. in the major, including at least one graduate seminar. The dissertation must be written in the major field of study within geography.

Minors

At least one outside minor required. It should be closely related to the internal major and must be chosen from approved programs of study outlined in this bulletin (unless exceptions are approved by the University Graduate School).

Qualifying Examination

Written and oral, covering the areas of concentration, other aspects of geography, and the tentative dissertation problem.

Research Proposal

The proposed research for the dissertation must be approved by the research committee and presented at a departmental colloquium.

Final Examination

Oral defense of the dissertation.

Ph.D. Minor in Geography

The requirements for the Ph.D. minor are flexible. A student's specific program should be developed in consultation with the minor-field advisor in geography. Typical fields include Atmospheric Science, Human-Environment Interaction, Human Geography, and Geographic Information Science. A minimum of 9 credit hours of course work.

Faculty

Chairperson

Professor Scott M. Robeson*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Rebecca J. Barthelmie*, William R. Black* (Emeritus), Dennis Conway* (Emeritus), Daniel Curtis Knudsen*, Sara C. Pryor*, Scott M. Robeson*

Associate Professors

Tom P. Evans*, Charles Greer* (Emeritus), A Faiz Rahman*, Ernest Wohlenberg* (Emeritus)

Assistant Professors

Constance M. Brown*, Rebecca Lave, Rinku Roy Chowdhury*

Assistant Scientist

Danilo Dragoni

Adjunct Professors

Bennet Brabson (Physics) (Emeritus), C. Sue Grimmond (King's College London), David MacKay* (Business) (Emeritus), Emilio Moran* (Anthropology, CIPEC), Hans Peter Schmid (University of Munich) Philip Stevens* (Public and Environmental Affairs), Dallen Timothy (Arizona State University)

Adjunct Associate Professors

Timothy Brothers (Indianapolis), Owen Dwyer (Indianapolis), Jeffrey Wilson (Indianapolis)

Adjunct Assistant Professors

James J. Biles

Director of Graduate Studies

Professor Sara C. Pryor*, Student Building 120, (812) 855-6303

Courses

GEOG–G 425 Africa: Contemporary Geographic Problems (3 cr.)

GEOG–G 427 Russia and Its Neighbors (3 cr.)

GEOG–G 428 Geography of Europe (3 cr.)

GEOG–G 500 Research Problems in Geography (4 cr.) Examination of current research areas and research problems in geography. Introduction to research design and research methods.

GEOG–G 501 Research Problems in Geography II (3 cr.) P: G500. Further development of research formulation and design skills. Approaches to geographic research and the preparation of research problem statements and proposals that may lead to thesis or dissertation research.

GEOG–G 502 Introduction to Transportation Analysis (3 cr.) An examination of classical and contemporary approaches to the analysis of transport systems, spatial interaction, sustainable transport, and related environmental and economic aspects of transport at regional and national scales. Note: This course is not being offered at this time.

GEOG–G 504 Advanced Quantitative Methods in Geography (3 cr.) P: G488 or G588 or equivalent. Further development of quantitative techniques to geographic problems. Methods of multivariate analysis, multiple response models, and mapping of three-dimensional or greater space.

GEOG–G 505 Hydroclimatology (3 cr.) P: G304 or G532 or consent of instructor. Hydroclimatic processes at a range of spatial scales. Topics include cloud and precipitation processes, soil water physics, runoff, and evaporation. Lecture and laboratory.

GEOG–G 506 Sustainable Transportation (3 cr.) P: G502. An examination of non-sustainability in the transport sector. Problems of petroleum depletion, air quality and its impact on human health, carbon dioxide emissions and their impact on global warming, transport accidents and congestion are examined along with planning, policy, and technological solutions to these problems. Note: This course is not being offered at this time.

GEOG–G 509 Seminar in the History and Philosophy of Geography (3 cr.) P: Consent of instructor. This course examines the history of geography. Particular reference is made to the use of philosophical traditions of positivism, structuralism, humanism, and postmodernism within geography and to the major debates about philosophy and methodology in the last two centuries within the discipline. Note: This course is not being offered at this time.

GEOG–G 511 Sustainable Development Systems (3 cr.) P: G208 or consent of instructor. An examination of the notion of sustainable development and its meaning and implementation in the areas of resources, agriculture, water, transport, cities, and tourism. Also considers how such systems can be implemented in developed countries.

GEOG–G 512 Urban Transportation Analysis (3 cr.) P: G312 or G502 or consent of instructor. Aspects of urban transportation planning process. Existing travel patterns, variations in trip generation, spatial interaction and distribution models, assignment of trips to existing networks, and the evaluation of future networks. (This course is not being offered at this time.)

GEOG–G 513 Advanced Economic Geography (3 cr.) P: G313 or consent of instructor. Advanced economic geographic theory and location decision making. Applications include agricultural, industrial, and commercial location decision making as well as geographic understanding of the wider regional development process. Students will be expected to demonstrate understanding of theories and location decision making graphically and mathematically.

GEOG–G 515 Sustainable Urbanism (3 cr.) P: G314 or consent of instructor. In-depth examination of "green urbanism" and sustainable urban development. Sustainable urbanism is viewed as an integral part of,

and not distinct from, global environmental sustainability. Lessons from European cities inform the assessments of North America's urban future. Note: This course is not being offered at this time.

GEOG–G 517 Geography and Development: Critical Perspectives (3 cr.) Critical analysis of development theory, development practice, and the discourse of development, particularly within the context of the Third World. Geographic approach to the study of neoliberalism and globalization, commodity chains, transnational corporations, multi-lateral organizations, labor relations, NGOs, consumption practices, sustainability, gender, and culture. Note: This course is not being offered at this time.

GEOG–G 520 Migration and Population Redistribution (3 cr.) P: G314, G320, or consent of instructor. Study of international regional and intraurban migration using micro- and macro-level approaches, and the impacts of population redistribution on origin and destination. Topics include illegal immigration to the U.S., rural to urban migration in LDCs, international migration and refugees, and gender differences in migration behavior. Note: This course is not being offered at this time.

GEOG–G 531 Dynamic Meteorology (3 cr.) P: MATH M211-M212, PHYS P201 or P221 (P221 recommended), GEOG G304 or G532 or consent of instructor. Introduction to dynamical processes and analysis in the atmosphere. Principles of fluid dynamics and their application to the atmosphere. Basic conservation laws and equations of motion. Circulation and vorticity. Dynamics of synoptic systems: quasigeostrophic analysis; oscillations and waves; baroclinic instability; and cyclogenesis. General circulation. Numerical modeling.

GEOG–G 532 Physical Meteorology and Climatology (3 cr.) Topics span all the scales of atmospheric processes; from climate change to weather forecasting and surface energy budgets. Students are introduced to the physical processes and properties of the atmosphere. Skills used to study and quantify atmospheric processes, such as the use of models and remote sensing, are also developed.

GEOG–G 533 Advanced Synoptic Meteorology and Climatology (3 cr.) P: G304 or G532 or consent of instructor. Analysis and prediction of synoptic scale weather systems, emphasizing the mid-latitudes. Other topics covered include severe weather and atmospheric/oceanic teleconnections.

GEOG–G 534 Air Pollution Meteorology (3 cr.) P: G304 or G532 or consent of instructor. Analysis of the physical laws that govern the transport, transformation, and removal of atmospheric pollutants. Primary emphasis will be on physical and chemical processes, although biological impacts will also be considered.

GEOG–G 535 Environmental Remote Sensing (3 cr.) Principles of remote sensing of the earth and its atmosphere, emphasizing satellite data in visible, infrared, and microwave portions of the electromagnetic spectrum. Emphasis on practical applications and digital image analysis. A satellite data analysis project is required.

GEOG–G 536 Advanced Remote Sensing: Digital Image Processing (3 cr.) P: G535 or consent of instructor. Advanced remote sensing theory and digital image processing techniques with an emphasis on environmental science applications. Hands-on computer exercises provide significant experience in digital image processing techniques for extraction of qualitative and quantitative information about Earth's terrestrial and aquatic environments.

GEOG–G 538 Geographic Information Systems (3 cr.) Overview of the principles and practices of Geographic Information Systems (GIS). Spatial data models, database design, introductory and intermediate GIS, operations and case studies of real-world GIS applications. Laboratory exercises will provide significant hands-on experience. Lecture and laboratory.

GEOG–G 539 Advanced Geographic Information Systems (3 cr.) P: G538 or consent of instructor. Intermediate and advanced topics in geographic information science and spatial analysis techniques using GIS software. This advanced course is for students who seek a greater understanding of this rapidly developing field and want to learn how to construct, manage, and analyze their own GIS data and models.

GEOG–G 540 Topics in Environmental Geography (1–3 cr.) P: G305 or G315 or consent of instructor. Selected topics focus on the human dimensions of environmental change/conservation. Example focus topics: population-environment interactions, transport-environment interactions, and urban-environment interactions.

GEOG–G 542 Sustainable Energy Systems (3 cr.) Examination of current energy use and the role of renewable energy resources in meeting future demand. The course covers the physical and technological basis for geothermal, wind, solar, hydro, and marine energy in addition to the environmental, economic, and social impacts of developing and utilizing these sustainable resources.

GEOG–G 549 Political Ecology (3 cr.) P: G315, G320, G341, G343, or consent of instructor. This seminar introduces political ecology, an approach which focuses on the political-economic context of natural resource conflicts with particular attention to issues of equity, justice, and power. This course covers the theoretical lineage of political ecology, its development over the last 20 years, and current hot topics in the field.

GEOG–G 550 Instrumentation and Field Methods in Atmospheric Science (3 cr.) P: P or C: G304 or G532 or consent of instructor. Sampling, instrumentation, measurement, analysis, and interpretation of data concerning features and processes of the atmospheric environment. Use of field and laboratory equipment within the context of research and standard projects. Practical application of climatological and meteorological principles.

GEOG–G 551 Water Resources: Semi-Arid Environments (3 cr.) P: G107 and G109 and at least one 300-level physical/biological science course or consent of instructor. This course uses a series of lectures and seminar discussions to highlight the hydro-micrometeorological and human dynamics of semi-arid ecosystems/environments.

GEOG–G 555 Wind Power Meteorology (3 cr.) P: G304, G362 or consent of instructor. The science of wind power

meteorology will be explained with a focus on practical elements of how to measure wind resources, estimate wind turbine loads and wind turbine siting. The class is divided into a lecture and laboratory type format with project work.

GEOG–G 560 Geography Internship (1–4 cr.) P: Graduate level courses in geography and consent of instructor. Faculty-directed study of geographical problems based on an internship experience. Student's area of placement must be related to major field of study. Offered fall, spring, and each summer session. Student may complete more than one internship, but total credit earned cannot exceed 4 credit hours.

GEOG–G 561 Human Dimensions of Global Environmental Change (3 cr.) P: G208 or consent of instructor. Introduction of global environmental change (GEC), focusing on the human causes and consequences of biophysical transformations of land systems. Emphasis on socioeconomic, political, institutional, and environmental dimensions of land change; tropical forests, grasslands, and urbanizing areas; international environmental regimes; spatial methodologies in GEC research; and integrated approaches.

GEOG–G 562 Dynamic Meteorology: Boundary-Layer Meteorology (3 cr.) P: G304, G107 or G109 or consent of instructor. The atmospheric-boundary layer is the interface between the free atmosphere and the surface. Basic meteorological theory for processes in the atmospheric boundary-layer that scale from the microscale to the mesoscale. Aerodynamic and energy budget concepts. Development and application of boundary-layer models and associated parameterizations. Lecture and laboratory format.

GEOG–G 570 Micrometeorology (3 cr.) P: G304 or G532, MATH M211-M212, or consent of instructor. Atmospheric processes at the micro and local scale. Topics include energy and mass exchange over simple non-vegetated surfaces, vegetated surfaces, non-uniform terrain, and inadvertent climate modification.

GEOG–G 571 Topics in Micro- and Boundary-Layer Meteorology (3 cr.) P: G570, MATH M211-M212, PHYS P201 or P221 (P221 recommended), or consent of instructor. Topics may include surface-vegetation-atmosphere interaction; dynamics of turbulent transport; boundary-layer dynamics; turbulent kinetic energy and stability; dimensional analysis and similarity theory; effects of surface inhomogeneity on boundary-layer dynamics; patchiness; urbanization; regional aggregation of surface atmosphere exchange; applications to mesoscale modeling and air pollution dispersion modeling.

GEOG–G 575 Climate Change (3 cr.) P: At least two undergraduate courses in the physical sciences or consent of instructor. Evidence for and theories of climate change over a range of time scales. Sources of natural climate forcing are presented, historical evolution of climate change is quantified, and model tools and climate projections are presented along with analyses of climate change impacts.

GEOG–G 577 Topics in Atmospheric Science (3 cr.) P: G304 or G532 or consent of instructor. Selected topics in microclimatology, dynamic meteorology, statistical methods in climatology climatic change, radiation theory, or other areas of climatology and meteorology.

GEOG–G 578 Global Change, Food and Farming Systems (3 cr.) P: G208 or consent of instructor. Introduction to food production and consumption systems, emphasizing linkages to land use and social change on food/farming system sustainability. Topics include: urbanization, population growth, and economic liberalization; farming livelihoods, gender and poverty; biotechnology; agro-ecology; global health.

GEOG–G 582 Cultural Geography (3 cr.) Familiarizes students with the basic concepts and ideas that underpin the study of cultural geography, including the history of cultural geography, the constitution of the cultural landscape, and how landscape fractures across the lines of ethnicity, gender, and age.

GEOG–G 588 Applied Spatial Statistics (3 cr.) P: Consent of instructor. Extension of traditional statistical analysis to spatial data. Spatial means and spatial variances, the examination of differences in samples over space, spatial autocorrelation, nearest neighbor analysis, map comparison techniques. Emphasis on practical applications.

GEOG–G 589 Atmospheric Data Analysis (3 cr.) P: An introductory course in statistics or consent of instructor. Introduction to methods of data analysis used in the atmospheric sciences, emphasizing applications. Topics include statistical forecasting, spatial interpolation, spectral analysis and filtering, vector data analysis, and model evaluation.

GEOG–G 591 Methods of Population Analysis and Their Applications (3 cr.)

GEOG–G 602 Topical Seminar in Atmospheric Science (1–3 cr.) Topics will vary to consider aspects of atmospheric science.

GEOG–G 603 Topical Seminar in Human Geography (3 cr.) P: Consent of instructor. Topics will vary to consider aspects of human geography.

GEOG–G 604 Topical Seminar in Human-Environment Interaction (3 cr.) Topics will vary to consider aspects of human-environment interaction.

GEOG–G 639 Topical Seminar in Geographic Information Science (3 cr.) Applications of geographic information science principles in the collection and analysis of spatial data. Integration of GIS, remote sensing, and GPS technologies. Review of current literature on techniques, theory, technology, and applications with an emphasis on environmental topics. Discussion, laboratory, and research project.

GEOG–G 830 Readings in Geography (arr.–12 cr.) P: Advanced courses in geography or closely related fields. Supervised readings on selected topics.

GEOG–G 831 Advanced Research in Geography (1–6 cr.) P: Consent of faculty member. Individual research. S/F grading.

GEOG–G 840 Research in Geography (arr. cr.) P: Consent of faculty member. This course is eligible for a deferred grade. Individual research.

GEOG–G 845 Master's Papers (1–6 cr.) P: Consent of instructor. Research papers under supervision of faculty.

GEOG–G 850 Master's Thesis (arr.–6 cr.) This course is eligible for a deferred grade. Thesis.

GEOG–G 860 Ph.D. Thesis (arr. cr.) This course is eligible for a deferred grade.

Geological Sciences

College of Arts and Sciences

Departmental E-mail: geograd@indiana.edu

Departmental URL: geology.indiana.edu/

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

An undergraduate degree in the physical or natural sciences. It is expected that students will have an undergraduate background that includes course work in allied sciences/mathematics, equivalent to one year of chemistry and physics or biology, mathematics through differential and integral calculus, plus at least 6 credit hours of higher-level courses. A substantive foundation course in field geology or comparable independent field experience is also expected. Students with degrees in engineering or other related fields are also encouraged to apply. The general Graduate Record Examination is required.

Master of Science Degree

Course Requirements

A minimum of 30 graduate credit hours, including at least 20 credit hours in geological sciences.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including dissertation and 35 credit hours of course work approved for graduate credit (excluding G600, G700, and G810), of which a minimum of 20 credit hours must be taken within the Department of Geological Sciences.

Minor

Outside minor in a related field (including chemistry, physics, biology, mathematics, and environmental sciences), or, under certain conditions, in geochemistry, geophysics, or geobiology.

Foreign Language/Research-Skill Requirement

Reading proficiency in one foreign language (French, German, Russian, or Spanish) or a research skill in mathematics, computer science, chemistry, or physics. Courses taken to satisfy this requirement do not necessarily carry graduate credit. For specific details concerning approved research-skill courses, consult the Director of Graduate Studies.

Preliminary Examination

Comprehensive: written.

Qualifying Examination

Written and oral.

Final Examination

Oral defense of the dissertation.

Faculty

Simon Brassell*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Haydn H. Murray Chair

David L. Bish*

Judson Mead Assistant Professor

Kaj Johnson

Distinguished Professor

Peter Ortoleva* (Chemistry)

Provost's Professor

Lisa M. Pratt*

Professors

Abhijit Basu*, David L. Bish*, Simon C. Brassell*, Jeremy D. Dunning*, Hendrik Haitjema* (Public and Environmental Affairs), Michael W. Hamburger*, Gary Lee Pavlis*, Lisa M. Pratt*, Edward M. Ripley*, Juergen Schieber*, Jeffrey White* (Public and Environmental Affairs), Robert P. Wintsch*

Associate Professors

James G. Brophy*, Claudia C. Johnson*, Gregory A. Olyphant*, P. David Polly*, Chen Zhu*

Assistant Professors

Kaj Johnson, Laura Wasylenki

Professors Emeriti

J. Robert Dodd*, Donald Hattin*, Erle Kauffman*, Noel Krothe*, Judson Mead*, Enrique Merino*, Haydn Murray*, Albert J. Rudman*, Lee J. Suttner*

Senior Scientists

Chusi Li*, Arndt Schimmelmann*, John Steinmetz*

Assistant Scientist

Erika Elswick

Senior Lecturer

Bruce Douglas

Associated Research Faculty

Brian Keith* (Geological Survey), Sally Letsinger (Geological Survey), Maria Mastalerz (Geological Survey),

Michael Prentice (Geological Survey), Todd Thompson* (Geological Survey)

Director of Graduate Studies

Associate Professor Claudia C. Johnson, Geology Building 501, (812) 855-0646 or (800) 553-2592

Courses

GEOL–G 404 BIOL L105 and G334. (3 cr.) Application of biological principles and use of fossils in the study of earth history. Origin of life and the early fossil record; evolution; approaches of taxonomy; chemistry of fossils; ecology of ancient life; use of fossils to measure geologic time.

GEOL–G 406 Introduction to Geochemistry (3 cr.) P: G222, MATH M212 or M216, and CHEM C106. Chemistry in the study of the earth, employing elementary chemical thermodynamics, the phase rule, chemical equilibria, redox, reactions, the radioactive decay law, and organic chemistry.

GEOL–G 411 Invertebrate Paleontology (3 cr.) P: BIOL L105 or S105; and one 300-400-level course in biology or geology. Structure, classification, habitats, and geological history and significance of the invertebrate phyla. Laboratory study of fossils.

GEOL–G 413 Introduction to Geophysics (3 cr.) P: Physics P202 and P222 and Mathematics M212 or M216. Application of physics in the study of geologic and environmental problems. Theory and application of seismic, gravity, magnetic and electric methods in exploration of the earth's subsurface, with emphasis on near-surface processes.

GEOL–G 415 Geomorphology (3 cr.) P: G222, college chemistry and mathematics or consent of instructor. Application of physics in the study of geologic and environmental problems. Theory and application of seismic, gravity, magnetic and electric methods in exploration of the earth's subsurface, with emphasis on near-surface processes.

GEOL–G 416 Economic Geology (3 cr.) P: G334; CHEM C106-C126 or consent of instructor. Geologic occurrence and genesis of economic mineral deposits, including petroleum and coal. Introduction to mining, processing, and exploration methods. Two lectures and one 2-hour laboratory meeting per week.

GEOL–G 417 Optical Mineralogy (3 cr.) P: G222. Theory and use of optics in the identification and classification of rock-forming minerals in fragments and thin sections. One lecture and two 2-hour laboratory meetings per week.

GEOL–G 418 Igneous and Metamorphic Petrology (3 cr.) P: G222 or equivalent. The petrogenesis of igneous and metamorphic rocks. Both the lecture and laboratory portions of the course will stress the application of modern petrographic, mineralogic, geochemical and phase equilibria techniques to the solution of relevant petrologic problems. Two lectures and one 2-hour laboratory meeting per week.

GEOL–G 420 Regional Geology Field Trip (1–2 cr.) P: Consent of instructor. Field investigation of selected regions of North America for study of mineralogical, lithological, stratigraphic, structural, paleontological, geomorphological, or other geological relationships. Six to ten days in the field.

GEOL–G 423 Methods in Applied Geophysics (4 cr.) P: G413 or equivalent. Application of geophysical principles to field and laboratory experiments, with emphasis on data acquisition, analysis, and geologic interpretation. Experiments include earthquake seismology, electrical resistivity, magnetic and gravity surveys, and reflection and refraction seismology.

GEOL–G 427 Introduction to X-Ray Mineralogy (2–3 cr.) P: G221. Theory and practice of X-ray powder diffraction. Measurement and analysis of digital diffractometer data, including profile fitting and Rietveld refinement, with applications to geological, environmental, and structural-chemical problems.

GEOL–G 429 Field Geology in the Rocky Mountains (5–8 cr.) P: G222, G323. Five to eight weeks, including four to six weeks at the Geologic Field Station in Montana. Geologic reconnaissance, measurement of stratigraphic sections, mapping on aerial photographs, construction of structure sections. Regional geomorphology, stratigraphy, and structure through South Dakota, the Black Hills, Wyoming, Montana, Yellowstone Park, and Glacier Park.

GEOL–G 451 Principles of Hydrogeology (5–8 cr.) P: Chemistry C106, Mathematics M212 or M216, and consent of instructor. Physical and chemical properties of water; chemical equilibria and stable isotopes in groundwaters; acid drainage, landfills, and agricultural pollution; Darcy's Law, fluid potential, unsaturated flow; fluid and aquifer properties affecting groundwater flow; fluid mass-balance equation and its application; contaminant transport.

GEOL–G 501 Sedimentary Processes and Environments (3 cr.) P: Graduate standing. Origin and controls of facies distribution in sedimentary systems. Field study of selected ancient facies systems.

GEOL–G 503 Phase Equilibria (3 cr.) P: C360, G406, or consent of instructor. Thermodynamic functions and conditions of equilibria in unary, binary, ternary, and multicomponent systems. Mixing properties of crystalline solutions. Chemical potential and activity diagrams.

GEOL–G 504 Metamorphic Petrology (3 cr.) P: G418, G503. The evolution of mineral assemblages and compositions during prograde metamorphism. Reaction mechanisms. Effect of fluid composition on mineral assemblages. Theoretical basis and description of various projection schemes. Appraisal of selected experimental studies.

GEOL–G 506 Principles of Igneous Petrology ((3 cr.) P: G418. Origin, composition, classification, phase relationships, and distribution of igneous rocks; economic considerations. Emphasis on province, associations, and facies type.

GEOL–G 509 Theoretical Geochemistry (4 cr.) P: C360, C361, P340, or G406 or the equivalent; consent of instructor. Thermodynamics and solution chemistry as tools in geochemistry; designed for students planning advanced work or research in geochemistry.

GEOL–G 513 Seismology I (3 cr.) P: MATH M343 or M313; PHYS P222. Earthquakes, propagation of elastic

waves, interpretation of seismological data, theory of seismological instruments. Core: solid-earth dynamics.

GEOL–G 514 Geophysical Signal Analysis (3 cr.) P: PHYS P222; MATH M343 or M313. Construction, analysis, and interpretation of geophysical signals. Filter theory, spectral analysis, signal-to-noise enhancement, transform theory, seismic wave propagation, computer applications.

GEOL–G 515 Analysis of Earthquake Seismograms (1 cr.) P: G413. Analysis of local, regional, and teleseismic phases recorded on the Indiana University long- and short-period seismographs. Use of seismic records to determine earthquake source parameters, deep earth structure, and near-station structure. Surface wave dispersion and structure of the lithosphere.

GEOL–G 520 Mechanics for the Earth Sciences (1 cr.) P: M211, M212. Fundamentals of continuum mechanics with emphasis on the derivation and solution of governing equations in elasticity, viscous flow, heat transfer, and groundwater flow. Problems in faulting, postseismic and postglacial relaxation, flexure of strata and lithosphere, emplacement of dikes/sills, flow of debris and ice, and groundwater flow.

GEOL–G 521 Micropaleontology (3 cr.) P: G404 or G411 or advanced standing in biological sciences. Morphology, biology, ecology, biostratigraphy, and phylogenetic relationships of microfossils. Course will survey the common fossil groups, including cyanobacteria, diatoms, dinoflagellates, acritarchs, foraminifera, and radiolaria.

GEOL–G 524 Carbonate Facies and Environments (3 cr.) P: Graduate standing. Carbonate environments from modern and ancient examples (including subsurface). Various ramp and platform margin depositional models. Emphasis on types and origin of facies. Current and classical literature on carbonates.

GEOL–G 535 Quaternary Geology (3 cr.) P: G415 or consent of instructor. Characteristics, distribution, and origin of Pleistocene and recent deposits; stratigraphy and chronology; formation of associated landforms, landscapes, paleosols, and soils; quaternary environments. Core: Environmental Geoscience.

GEOL–G 550 Surface Water Hydrology (3 cr.) P: G451 and M216, or consent of instructor. Mechanics of surface runoff and open channel flow. Rainfall-runoff equations, probability analysis of stream flow, and watershed simulation models. Chemistry of surface waters and stream pollution. Core: environmental geoscience.

GEOL–G 551 Advanced Hydrogeology (3 cr.) P: G451. Basic principles and quantitative aspects of physical flow systems and chemistry of ground water and surface water. The relationships between water and geologic materials. Core: environmental geoscience.

GEOL–G 553 Gravitational and Magnetic Field Analysis (2 cr.) P: G413; MATH M343 or M313; PHYS P222. Potential field theory and its application in interpretation of gravity and magnetic fields. Core: solid-earth dynamics.

GEOL–G 554 Fundamentals of Plate Tectonics (2 cr.) P: Graduate standing in geology or consent of instructor. Synthesis of observations from diverse disciplines of geology leading to the development of modern plate tectonic theory. Applications of plate tectonic principles to fundamental problems of continental and marine geology. Core: solid-earth dynamics.

GEOL–G 561 Paleoecology (3 cr.) P: G334 and G404 or G411. Relationships between modern and fossil organisms and their physical, chemical, and biological environments; emphasis on techniques for interpreting past environmental conditions.

GEOL–G 571 Principles of Petroleum Geology (3 cr.) P: G323. Origin, geochemistry, migration, and accumulation of petroleum; reservoir rocks; types of entrapment; exploration procedures and their rationale; methods and devices for data gathering and detection.

GEOL–G 572 Basin Analysis and Hydrocarbons (3 cr.) P: G323 and G334. Modern concepts of tectonics and sedimentary basin analysis. Geologic application of geophysical logs and seismic stratigraphy to basin analysis, facies distribution, and structural style in a variety of basin types with specific examples from around the world. Techniques of hydrocarbon assessment in basinal settings.

GEOL–G 581 Surficial Geology (3 cr.) Study of earth surface process, landforms, and unconsolidated deposits is fundamental to several subdisciplines of geology, especially hydrogeology and environmental geology.

GEOL–G 582 Computational Methods for Earth Scientists (3 cr.) P: M211-M212 or equivalent. Students will develop numerical solutions to ordinary and partial differential equations which describe a wide variety of geologic processes which could include fluid flow, heat transfer, sediment transport, seismic wave propagation through elastic solids, isotopic fluid-rock interactions.

GEOL–G 583 Isotope Geochemistry (3 cr.) Introduction to the theory and application of radiogenic and stable isotopes to a variety of subdisciplines in the earth sciences. Topics include geochronology, tracers, mass balance and mixing, hydrology and environmental applications, water-rock interaction, and biogeochemical cycles.

GEOL–G 584 GIS Applications in Geology (3 cr.) P: Experience in GIS or map reading. Application of Geographic Information System (GIS) and Global Positioning System (GPS) technologies address problems in the geosciences. Field mapping using GPS and other methods is undertaken to develop GIS layers and attributed features that are analyzed to support or refute specific research hypotheses.

GEOL–G 586 Geochemical Modeling (3 cr.) P: C360, C361, P340, or G406 or the equivalent; consent of instructor. Introduces students to the theories and applications of geochemical modeling. Students will have the opportunity to acquire hands-on experience with popular geochemical codes.

GEOL–G 587 Organic Geochemistry (3 cr.) P: Consent of instructor. Application of organic geochemical methods in determining origins of fossil fuels and in defining biological and environmental histories of rocks.

GEOL–G 588 Paleobiogeography (3 cr.) P: L318; G404 or L374; G561 or L473. Introduction to the theory and practice of analyzing the spatial and temporal distribution of past life, with consideration of the biostratigraphic evolution of major life forms. Models of dispersion patterns are analyzed within a plate tectonic and paleoclimate context.

GEOL–G 589 Geomicrobiology (3 cr.) P: Two semesters each of undergraduate biology and chemistry. Geomicrobiology provides an introduction to the diversity and physiology of microbes in soil, sediment, lake, ocean, and ground-water environments. The first half of the course focuses on microbial classification, growth, metabolism, and genetic phylogeny in order to build a conceptual framework and technical vocabulary. The second half of the course integrates lecture with discussion of recently published journal articles.

GEOL–G 591 Physical Sedimentology (3 cr.) P: G415, G501 or equivalent. Dynamics of fluid flow, hydraulics of sediment transport, interaction of physical processes in depositional environments. Field study of selected modern depositional environments.

GEOL–G 592 Chemical Sedimentology (3 cr.) P: G509, G418, or consent of instructor. Study of low-temperature (< 300 degrees C) mineral assemblages in order to infer their chemical conditions of formation.

GEOL–G 600 Advanced Techniques (arr. cr.) P: Consent of instructor. **These courses are eligible for a deferred grade. Training in special geologic methods such as exploration seismology, experimental petrology, X-ray spectroscopy, electron probe microanalysis, isotopic and organic mass spectrometry.

GEOL–G 601 Clay Mineralogy (3 cr.) P: Consent of instructor. Composition, structure, properties, methods of identification, and origin and distribution of clay minerals. Core: sedimentary systems.

GEOL–G 612 Inverse Methods in Geophysics (2 cr.) P: MATH M301, M303, or equivalent. Mathematical techniques to infer the properties of the deep interior of the earth from geophysical data and to appraise the reliability of the results. Theory of generalized inverses in finite dimensional vector spaces and Hilbert space. Resolving power of data. Nonlinear inverse methods.

GEOL–G 613 Seismology II (3 cr.) P: G513. Theory of wave propagation in layered elastic media: Lamb's problem, Cagnaird's method, and propagator matrices. Body force equivalents and the moment tensor representation of seismic sources. Additional selected topics.

GEOL–G 616 Metalliferous Mineral Deposits (3 cr.) P: G416 and G406, or equivalent. Geological processes controlling ore deposition. Application of stable and radioactive isotopes, fluid inclusions, and thermodynamics to the study of ore deposits. Laboratory study of opaque minerals using reflected light microscopy.

GEOL–G 617 Geochemical Exploration (3 cr.) P: G416. Application of geochemical methods in the search for mineral deposits, including analytical techniques, migration of elements, data interpretation, and field problems. Lecture and laboratory.

GEOL–G 626 Industrial Minerals (3 cr.) P: G416. Origin, mode of occurrence, distribution, and uses of mineral commodities other than ores and fuels. Geology of the rocks and minerals used for building materials, chemical raw materials, refractories, fillers, abrasives, fertilizers, fluxes, insulation, filtering agents, and pigments.

GEOL–G 633 Advanced Geophysics Seminar (1–3 cr.) P: Consent of instructor. S/F grading. Selected topics in earth physics.

GEOL–G 637 Seminar in Tectonics (1 cr.) P: Consent of instructor. Multidisciplinary seminar focusing on regional-scale deformation of the earth's lithosphere.

GEOL–G 685 Evolution of Ecosystems (3 cr.) P: G561 or L575; Isotope Systemics; statistical methods. Advanced analysis of large-scale, cohesive environmental influences on ecosystem development and persistence through the rock record. Emphasis on paleoecologic grouping at community and higher levels. Analytical methods include advanced statistics and synthesis of published numerical, geochemical, and sedimentologic models.

GEOL–G 690 Advanced Geology Seminar (arr. cr.) P: Consent of instructor. S/F grading. Seminars on critical research issues and topical themes.

GEOL–G 700 Geologic Problems (1–5 cr.) P: Consent of instructor. **These courses are eligible for a deferred grade. Consideration of special geological problems.

GEOL–G 810 Research (arr. cr.) **These courses are eligible for a deferred grade.

Institute of German Studies

College of Arts and Sciences

Departmental E-mail: germanic@indiana.edu

Departmental URL: www.indiana.edu/~germanic/institute/

Curriculum

Program Information

The Institute of German Studies provides graduate students with a flexible curriculum to pursue study and research in the society and cultural production of German-speaking Europe from 1740 to the present. Most work on this subject unfolds through consideration of diverse critical paradigms. Study in the Institute is linked closely, but not exclusively, to the master's degree in modern German culture in the Department of Germanic Studies and is also open to students from related disciplines (e.g., West European Studies, History, Political Science, Philosophy, the Program in Cultural Studies, the Jewish Studies Program, and the School of Music). The Institute also offers a Ph.D. minor. Courses are taught by the faculty of the Department of Germanic Studies specializing in 1740 to the present and by instructors in related disciplines.

Ph.D. Minor in German Studies

The Ph.D. minor in German studies is available to doctoral students in all departments except Germanic Studies; 15 credit hours of course work are required. Consult the director of the Institute for information regarding courses acceptable for the minor.

Faculty

Director

Associate Professor Michael Chaouli*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

George Buelow* (Emeritus, Music), Matei Calinescu* (Emeritus, Comparative Literature), Frederick Churchill* (Emeritus, History and Philosophy of Science), James Diehl* (Emeritus, History), Paul Eisenberg* (Emeritus, Philosophy), Norman Furniss* (Emeritus, Political Science), Ingeborg Hoesterey* (Emerita, Germanic Studies, Comparative Literature), Hildegard Keller* (Germanic Studies), Breon Mitchell* (Germanic Studies, Comparative Literature), Elinor Ostrom* (Political Science), David Pace* (History), William W. Rasch* (Germanic Studies), Alvin Rosenfeld* (English), Terence Thayer* (Emeritus, Germanic Studies), Marc A. Weiner* (Germanic Studies, Comparative Literature)

Associate Professors

Claudia Breger* (Germanic Studies), Fritz Alwin Breithaupt* (Germanic Studies, West European Studies), Michel Chaouli* (Germanic Studies), Michelle Facos* (Fine Arts)

Assistant Professors

Benjamin Robinson* (Germanic Studies), Johannes Türk* (Germanic Studies), Brigitta Wagner* (Germanic Studies)

Academic Advisor

Associate Professor Michael Chaouli*, Ballantine Hall 660, (812) 855-8847

Courses

The following, nonexclusive list contains examples of the kinds of courses that may be taken outside of the Department of Germanic Studies for credit in the Institute.

V605 Selected Topics in German Studies (2-4 cr.; 12 cr. max.)
V815 Individual Readings in German Studies (1-8 cr.) May be repeated for credit.

Anthropology
E607 Selected Topics in German Studies (2-4 cr.; 12 cr. max.)
V815 Individual Readings in German Studies (1-8 cr.) May be repeated for credit.

Comparative Literature
C504 Topics in World Criticism and Theory II (4 cr.)
C546 Sexuality and the Arts (4 cr.)
C555 Theory and Methods of Interarts Studies (4 cr.)
C602 Contemporary Theoretical Issues and Approaches (4 cr.)
C655 Topics in Interarts Studies (4 cr.)

Film Studies
C590 Film and Society (4 cr.)
C693 Film Adaptations of Literature (4 cr.)
C790 Studies in Film and Literature (4 cr.)
C792 Film History and Theory (4 cr.)

Fine Arts
A442 Twentieth-Century Art 1900-1924 (4 cr.)
A495 Readings and Research in Art History (1-4 cr.; 8 cr. max.) Topic: Twentieth-Century German Art.

Germanic Studies
G503 Introduction to Theories and Methodologies in the Study of German Literature and Culture (3 cr.)
G563 German Culture Studies I (3 cr.)
G564 German Culture Studies II (3 cr.)
G575 Historical Study of German Literature III (3 cr.)
G577 Historical Study of German Literature IV (3 cr.)
G625 Literature and Culture: Special Topics (3 cr.)
G825 Seminar in German Literature (3-4 cr.)

History
B366 Paris and Berlin in the 1920s: A Cultural History (3 cr.)
B378 History of Germany since 1648 II (3-3 cr.)
B393 German History: From Bismarck to Hitler (3 cr.)
H523 The Holocaust (3 cr.)
H620 Colloquium: Modern Western European History (4 cr.) Topic: Problems in Modern German History.

History and Philosophy of Science
X567 Science in Germany: Nineteenth and Twentieth Centuries (3 cr.)
School of Music, Department of Musicology
M502 Composers (3 cr.) Topic: Wagner/Beethoven/Strauss.

Philosophy
P522 Topics in the History of Modern Philosophy (3 cr.)
P544 Selected Topics in History of Social and Political Philosophy (3 cr.)

Political Science
Y657 Comparative Politics (3 cr.)
Religious Studies
R680 Religion and the Problems of Modernity (3 cr.)

Sociology
S660 Advanced Topics (3 cr.) Topic: The Sociological Structures of the United States and Germany.

West European Studies
W301 Modern European Politics and Society (3 cr.)
W302 Modern European Culture and National Identities (3 cr.)

Additional courses are often drawn from the nonexclusive list of departments and programs given above. Consent of the director of the Institute and from the individual instructor of each course must be obtained to enroll.

Germanic Studies

College of Arts and Sciences

Departmental E-mail: germanic@indiana.edu

Departmental URL: www.indiana.edu/~germanic/

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master's Degrees

Master of Arts Degree

Students may follow one of two different curricula in pursuit of the M.A. degree: Master of Arts in Germanic Studies and Master of Arts in Modern German Culture. Admission requirements are the same for both programs, and the official degree title for both options is the M.A. in Germanic Studies.

Admission Requirements

Near-native command of German and undergraduate major in the field or other evidence of adequate background. Deficiencies may be removed by course work or special examination.

Master's Project

Both the Master of Arts in Germanic Studies and the Master of Arts in Modern German Culture require successful completion of a master's project, which is intended to give students experience in carrying out a limited scholarly investigation to their fullest potential. The project is normally submitted after three or four semesters of study but may be submitted as early as the first year. It entails appropriate revision and oral defense of a research paper of 20 to 30 pages originally written for a graduate course in Germanic Studies. The paper should demonstrate command of expository English or German, competence in the use of bibliographic and research tools, ability to conceive and develop a scholarly project, and effective critical and analytical thinking. It is recommended that students consult with appropriate faculty members regarding selection and revision of the project paper. A three-person faculty committee evaluates each project and conducts an oral defense that examines the candidate's ability to present concisely the main argument(s) of the project, place the project in larger scholarly contexts, discuss sources and scholarly literature used, and respond effectively to committee members' questions and comments. Students have the option of enrolling in German G850 Master's Project for one credit so that the project's completion is reflected on their permanent academic record and transcripts.

Master of Arts in Germanic Studies

Course Requirements

A total of 30 credit hours, including one of G532, G540, G548, G551, G558, G632, G635, G638, G639 or G640; one seminar or colloquium at Indiana University. At least 9 additional credit hours in Germanic studies and one Germanic Literature course numbered 500 or above.

Language Requirement

Reading proficiency in an additional foreign language, preferably French.

Thesis

Not required.

Master of Arts in Modern German Culture

Course Requirements

A total of 30 credit hours of which at least 21 one must be and all 30 may be in German. Up to 9 credit hours may be taken in other relevant programs and departments (history, comparative literature, etc.).

Language Requirement

Reading proficiency in an additional foreign language, preferably French.

Master of Arts for Teachers Degree

Admission Requirements

20 credit hours of course work (or the equivalent) beyond first-year German.

Course Requirements

A total of 36 credit hours; at least 20 of these must be in Germanic Studies, including G500, G540, two courses from G532, G548, G551, and G558; two literature or culture courses in German, one of which may be at the 400 level. Students must demonstrate proficiency in depth in German; contact the language coordinator in the department for information.

Doctor of Philosophy Degree

General Information

Admission Requirement

M.A. in German or equivalent. Students with a master's degree in a related discipline who have completed extensive graduate-level work in German may also apply.

Credit Transfer

Entering doctoral students may present up to 30 credit hours of previous graduate-level work towards the 90-hour minimum required for the Ph.D. degree, subject to the regulations and approval of the University Graduate School.

Language

Reading proficiency in French. A substitution may be permitted; such a substitution should serve the candidate's major research interests.

Other Requirements

Specific departmental course and credit-hour requirements for each of the three Ph.D. majors are outlined below.

Examinations

A two-part written examination followed by an oral examination. The form, content, and scheduling of the separate examinations vary from major to major.

Teaching

All doctoral students are required to complete at least one year of service as an associate instructor in Germanic Studies.

Ph.D. in Germanic Linguistics and Philology

Total credit hours: 90

Professional courses (3 cr.)

- G500

Linguistics courses (12-14 cr.)

Four from the following:
G532, G540, G548, G551, G558, G632, G635, G638, G639, G640, G601 Introduction to Old English, G655 History of the English Language

Seminars (6-8 cr.)

(two required at IU)

- G825 or G835
- G825 or G835

Literature courses (6 cr.)

Two from any modern German literature or culture courses numbered 500 or above.

Dissertation (up to 20 cr.)

Outside Minor (minimum 12 cr.)

Ph.D. in Medieval and Early Modern German Literature and Culture

This major is intended as one in medieval literature and culture, and the languages involved are regarded as tools rather than as ends in themselves. The interdepartmental outside minor must be taken in medieval culture. The 30-32 hours of required course work in German literature should include sufficient study of modern literature to prepare the candidate to teach college courses in this area on the second- and third-year levels.

Total credit hours: 90

Professional courses (3 cr.)

- G500

Seminars (two required at IU; 6-8 cr.)

- G825 or G835 (3-4 cr.)
- G825 or G835 (3-4 cr.)

German literature (29-31 cr.)

- G571 (3 cr.)
- G636 (3 cr.)
- G625 (with medieval topic) (3 cr.)
- G825 (with medieval topic) (3 cr.)
- Other literature (17-19 cr.)

Germanic linguistics (6-9) cr.)

- G635 (3 cr.)
- G640 (3 cr.)
- Recommended: any one from G532, G638, G639 (3 cr.)

Dissertation (up to 20 cr.)

Outside minor: medieval culture (18-23 cr.)

- Either F501 Med. French Lit. I (3 cr.) or L505 Medieval Latin (4 cr.)
- Additional hours in medieval culture (12-15 cr.)

Ph.D. in Modern German Literature and Culture

Professional courses

- G500 (3 cr.)

Seminars (two required at IU) (8 cr.)

- G825 or G835 (4 cr.)
- G825 or G835 (4 cr.)

Literature Courses (9 cr.)

- Any three from: G571, G573, G575, G577

Linguistic courses (6. cr.)

- One from G532, G632, G635, G638, G639, or G640 (3 cr.)
- One from G540, G548, G551 or G558 (3 cr.)

Dissertation (up to 20 cr.)

Outside minor (at least 12 cr.)

Outside Minors for the Ph.D.

All three Ph.D. program options in Germanic studies require the completion of an outside minor. The outside minor is selected in consultation with the graduate director or faculty advisor. Requirements for the outside minor are set by the outside minor department or program (i.e., not Germanic Studies). Please note that Dutch or Yiddish may be selected by Ph.D. students in Germanic Studies as an outside minor.

Some Ph.D. candidates in Germanic Studies complete the minor entirely outside the department, for example in cognitive science, French, West European studies, or gender studies. Detailed information about minors offered by other departments and programs can be found elsewhere in this bulletin. Detailed below are sample minor programs.

1. Dutch: 12 credits, consisting of N402, N403, N404, and N450.
2. Comparative Literature: four courses in Comparative Literature, including C501; fluent reading knowledge of at least one foreign language.
3. Cultural Studies: 4 courses for a minimum of 13 credits in courses approved for the Cultural Studies program, including C601 and either C701 or C790. Students must officially declare the minor during the early phase of their Ph.D. studies by consulting with the director of the Cultural Studies program. Satisfactory performance on the qualifying examinations in the student's major department is also required.
4. English and Germanic philology: four courses, to include English G601 Introduction to Old English and at least one of the other older Germanic languages, i.e., German G632, G635, G638, G639, and G640. The remaining courses may be chosen from ENG G602 Introduction to Middle English, G655 History of the English Language, L710 Beowulf, L711 (Topic: Old English Literature), GER G532, G625 with appropriate topic, G636, G835 with appropriate topic, and any of the remaining older Germanic languages listed. Also offered is an Area Certificate in English and Germanic Philology, requiring four courses in addition to the four required for the minor. These may include any of the courses listed above, as well as courses in other departments

that are relevant to the history and prehistory of the Germanic languages, and to early Germanic literature and culture.

5. Linguistics: 12 credits in linguistics or related courses, with a grade point average of 3.0 (B) or higher. The specific program for satisfying this requirement should be developed in consultation with the linguistics outside minor advisor.
6. Yiddish: Requirements include 12 credits, consisting of GER Y502, GER Y503, GER Y504, 3 remaining credits to be chosen from GER Y505, GER Y506, GER Y815, and other courses focusing on non-language Yiddish Topics.

Ph.D. Minor in Germanic Studies

Doctoral students from other departments desiring to minor in Germanic studies will choose one of the following:

1. German: 12 credit hours, including at least two courses numbered 500 or higher.
2. Netherlandic: N402, N403, N404, and N508 or N509.
3. Yiddish: Requirements include 12 credits, consisting of GER Y502, GER Y503, GER Y504, 3 remaining credits to be chosen from GER Y505, GER Y506, GER Y815, and other courses focusing on non-language Yiddish Topics.

For further information concerning the graduate program in Germanic Studies, see the Guide to Graduate Study, issued annually by the department.

Faculty

Chairperson
Professor Kari Ellen Gade*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Theodore M. Andersson* (Emeritus), Frank Banta* (Emeritus), Peter Boerner* (Emeritus, West European Studies), Catherine Clarke Fraser* (Emerita), Kari Ellen Gade*, Ingeborg Hoesterey* (Emerita, Comparative Literature), Albrecht Holschuh* (Emeritus), Hildegard Elisabeth Keller*, Dov-Ber Boris Kerler*, Breon Mitchell* (Comparative Literature), Ferdinand Piedmont* (Emeritus), William W. Rasch*, William Shetter* (Emeritus), Rex A. Sprouse*, Terence Thayer* (Emeritus), Stephen Wailes* (Emeritus), Marc A. Weiner*, Ulrich Weisstein* (Emeritus, Comparative Literature)

Associate Professors

Claudia Breger*, Fritz Alwin Breithaupt*, Michel Chaouli*, Tracy Alan Hall*

Assistant Professors

Susanne Even*, Benjamin Butt Robinson*, Johannes Türk*, Brigitta Wagner*

Adjunct Professors

Kathleen Bardovi-Harlig* (Second Language Studies), Robert Dennis Fulk* (English), Christoph Irmscher* (English), Mark Roseman* (History), William Scheuerman* (Political Science, West European Studies), Jeffrey Veidlinger* (History and Jewish Studies)

Adjunct Associate Professor

Laurent Pierre Dekydtspotter* (French & Italian, Second Language Studies), Sander Gliboff* (History and Philosophy of Science), Joshua Kates* (English)

Adjunct Assistant Professor

Michelle Moyd (History), Eyal Peretz* (Comparative Literature), Julia Roos (History), Sandra Shapshay (Philosophy)

Director of Graduate Studies

Associate Professor Fritz Alwin Breithaupt*, Ballantine Hall 655, (812) 855-4551

Courses

General Courses

GER–G 400 Deutsch: Oberstufe (3 cr.)

GER–G 403 Deutsche Literatur: Mittelalter bis Romantik (3 cr.)

GER–G 404 Deutsche Literatur seit der Romantik (3 cr.)

GER–G 500 College German Teaching (3 cr.) Required of associate instructors in their first year of teaching. An overview of teaching methodologies, their underlying theories, and their practical application in college-level German courses.

GER–G 503 Introduction to Theories and Methodologies in the Study of German Literature and Culture (3 cr.) Survey of critical approaches to the study of German literature and culture, with an emphasis on current theories and methodologies. Practical exploration of a selection of approaches through the discussion of selected literary or cultural materials.

Courses in Germanic Literature and Culture

GER–G 505 New Literary Theory and the German Text (3 cr.) P: G503. Survey of literary theory currently used in Germanic studies; differences between theory in German and in American Germanistik. Areas such as reception theory, Frankfurt School, structuralism, poststructuralism, psychoanalytic criticism, feminist criticism, New Historicism.

GER–G 563 New Literary Theory and the German Text (3 cr.) G363, G464, or HIST B377-B378. The formation of cultural traditions in the German-speaking countries prior to the twentieth century.

GER–G 564 German Culture Studies II (3 cr.) G363, G464, or HIST B378. Culture of the German-speaking countries in the twentieth century.

GER–G 571 Historical Study of German Literature I (3 cr.) Historical treatment of a literary topic involving substantial developments within the time period before 1600. Topics range from individual genres, types, or movements; to themes or ideas; to sociopolitical contexts of literature or its relationships to other art forms. May be repeated with different topic.

GER–G 573 Historical Study of German Literature II (3 cr.) Historical treatment of a literary topic involving

substantial developments within the time period between 1600 and 1800. Topics range from individual genres, types, or movements; to themes or ideas; to sociopolitical contexts of literature or its relationships to other art forms. May be repeated with different topic.

GER–G 575 Historical Study of German Literature III (3 cr.) Historical treatment of a literary topic involving substantial developments within the time period between 1800 and 1900. Topics range from individual genres, types, or movements; to themes or ideas; to sociopolitical contexts of literature or its relationships to other art forms. May be repeated with different topic.

GER–G 577 Historical Study of German Literature IV (3 cr.) Historical treatment of a literary topic involving substantial developments within the time period from 1900 to the present. Topics range from individual genres, types, or movements; to themes or ideas; to sociopolitical contexts of literature or its relationships to other art forms. May be repeated with different topic.

GER–G 605 Special Topics in Teaching German (3 cr.) P: Two years of college-level teaching experience. Advanced course in the theory and practice of teaching college-level German. Topics include task design for teaching different text types, language assessment and effective test development, and the role of technology in foreign language education.

GER–G 620 Representations of Gender and Sexuality in Modern European Culture (3 cr.) Introduction to the ways in which modern European identities have been shaped by notions of gender and sexuality, attention to the interplay between gender and race, religion, and class. Covers different media and different historical moments. Taught in English. Repeatable for a max. of 8 credits with a different topic.

GER–G 623 Intellectual History and Philosophical Traditions (3 cr.) Special topics on any aspect of the German-language philosophical tradition and/or intellectual history.

GER–G 625 Literature and Culture: Special Topics (3 cr.) Special topics on any aspect of the German language, literature, and/or cultural history.

GER–G 627 Film and Media: Special Topics (3 cr.) Special topics on any aspect of German-language film, media, interarts, and/or visual culture. May be repeated with a different topic.

GER–G 636 Old Icelandic Literature (3 cr.) P: G635 or equivalent. Medieval Icelandic poetic and prose literary texts; history of the literature. Some consideration of medieval Norwegian, Swedish, and Danish literature.

GER–G 815 Individual Readings (1–3 cr.) Guided readings in Germanic literature, linguistics, and culture. May be repeated.

GER–G 820 Research Tutorial (1–3 cr.) Work under faculty supervision that results in a scholarly paper, lecture, translation, bibliography, syllabus, or comparable product. May be repeated for credit once with a different topic.

GER–G 825 Seminar in German Literature (3–4 cr.)

GER–G 850 Master's Project (1 cr.) Revision and oral defense of a substantial research paper originally written for a graduate course in Germanic Studies.

GER–G 875 Research in German Literature (arr. cr.) **These courses are eligible for a deferred grade.

GER–V 605 Selected Topics in German Studies (2-4–12 cr.) Note: Course not currently offered.

GER–V 815 Individual Readings in German Studies (1–8 cr.)

Courses in Germanic Linguistics

GER–G 532 History of the German Language (3 cr.) Development from Primitive Germanic to New High German; German dialect geography. German as a member of the Germanic family and of the European linguistic area.

GER–G 540 Acquisition of German as a First and Second-Language (3 cr.) P: Knowledge of German; graduate standing or permission of instructor. Introduction to recent generativist scholarship on acquisition of German as a first and second-language. Consideration of broader theoretical issues. No prior knowledge of linguistics assumed.

GER–G 548 German Phonetics and Phonology (3 cr.) Introduction to phonetics and phonology of modern German with emphasis on description, analysis, and theory. Relevance of German data to issues in phonological theory.

GER–G 551 Structure of Modern German (3 cr.) Structural problems in the grammar of Modern Standard German, investigated by means of various current methodological approaches.

GER–G 558 Principles of German Morphology (3 cr.) In-depth study of the principles underlying word formation (morphology) in German. Comparative study of inflection, derivation, and compounding in German and English. Relevance of German data to morphological theory.

GER–G 632 Gothic (3 cr.) Transition from Indo-European to Germanic. History and development of Germanic dialects, with emphasis on prehistory of English and German. Comparative and descriptive analysis of Gothic phonology, morphology, and syntax.

GER–G 635 Old Icelandic (3 cr.) Descriptive grammar. Survey of literature and extensive reading of prose and poetry. History of Scandinavian in comparison with other Germanic languages.

GER–G 638 Old High German (3 cr.) Descriptive and comparative analysis of Old High German texts, with their dialect features.

GER–G 639 Old Saxon (3 cr.) Study of the Old Saxon (Old Low German) language. Readings from the Heliand and brief examination of other OS documents

GER–G 640 Middle High German (3 cr.) Introduction to Middle High German language, literature, and culture. Translation, linguistic analysis, and close reading of selections from major texts of the period 1170-1220.

GER–G 835 Seminar in Germanic Linguistics (3–4 cr.)

GER–G 885 Research in Germanic Linguistics (arr. cr.) **These courses are eligible for a deferred grade.

Courses in Norwegian

GER–K 501 Beginning Norwegian I (3 cr.) Development of listening comprehension, speaking, reading, and writing skills in a cultural context. Introduction to grammar.

GER–K 502 Beginning Norwegian II (3 cr.) P: K501 with the grade of C– or higher or equivalent. Further development of listening comprehension, speaking, reading and writing skills. Introduction to Norwegian literature and culture. Review of grammar and study of new grammatical topics.

GER–K 503 Intermediate Norwegian I (3 cr.) P: K502 with the grade of C– or higher or equivalent. Further development of oral and written command and language structures. Reading and discussion of literary and non-literary texts in a cultural context. Review of grammar and study of non-grammatical topics.

GER–K 504 Intermediate Norwegian II (3 cr.) P: K503 with the grade of C– or higher or equivalent. Advanced reading proficiency, systematic vocabulary building, composition, and discussion of literary and non-literary texts in cultural and historical contexts. Review of grammar.

Courses in Netherlandic

GER–N 401 Intensive Dutch I (3 cr.) Development of speaking ability, with stress on pronunciation, leading to fluency on restricted topics. Introduction to grammar. Reading of annotated stories.

GER–N 402 Intensive Dutch II (3 cr.) P: N401 or consent of instructor. Completion of grammatical study begun in N401; continued stress on speaking Dutch on selected topics; rapid expansion of reading ability using literary and cultural materials.

GER–N 403 Dutch Reading, Composition, and Conversation I (3 cr.) P: N402 or consent of instructor. Development of oral fluency; attention to idiom. Further grammatical study; attention to formal writing style. Readings in Dutch literature and culture.

GER–N 404 Dutch Reading, Composition, and Conversation II (3 cr.) P: N403 or consent of instructor. Further development of style and idiom in speaking and writing. Reading of novels. Oral and written practice on topics of contemporary Dutch life.

GER–N 450 The Golden Age of Dutch Culture (3 cr.) II Semester. Rise of the Dutch Republic; impact on technology, shipping, global commerce, and finance. Politics, social developments, religion, ideas, and culture of the Dutch Golden Age. Vermeer, Spinoza, Grotius, and other artists and writers. Special attention to Rembrandt, and to what can be learned about his times through his work. Note: Course not currently offered.

GER–N 505 Advanced Dutch I (3 cr.) P: N404. Prepares students for reading of a variety of texts, from literature, magazine articles, and other culture based texts. In oral and written responses to the readings, it is expected that students will demonstrate an awareness of, and sensibility to Dutch language and culture, and express their ideas in a manner consistent with advanced language work. Conducted in Dutch.

GER–N 506 Advanced Dutch II (3 cr.) P: N505. Introduces students to different levels of style and expression and to written argumentation in Dutch. Texts also include various literary genres and form the basis of in-class discussion and for exercises designed to develop oral and written fluency. Conducted in Dutch.

GER–N 508 The Golden Age of Dutch Culture (3 cr.) Rise of the Dutch Republic; impact on technology, shipping, global commerce, and finance. Politics, social developments, religion, ideas, and culture of the Dutch Golden Age. Vermeer, Spinoza, Grotius, and other artists and writers. Conducted in English. Credit given for only one of N508 or N450.

GER–N 509 Topics in Dutch Literature (3 cr.) Topics dealing with literature in Dutch. Readings in English translation of novels, plays, and poetry that reflect a specific topic chosen by the instructor. May be repeated for a maximum of 6 credit hours.

Courses in Scandinavian

GER–K 506 Topics in Scandinavian Culture (3 cr.) Topics dealing with language, literature, and culture in Norway and other Scandinavian countries in the more recent historical periods. Discussions located within a comparative overview of political, economic, and social realms of the Nordic nations. Lectures in English. May be repeated for a maximum of 6 credit hours.

GER–K 507 Topics in Scandinavian Literature (3 cr.) Topics dealing with literature in Norway and other Scandinavian countries. Discussions incorporate literary criticism, biography, and adaptations on film and stage in Nordic nations. Lectures in English. May be repeated for a maximum of 6 credit hours.

GER–K 591 Scandinavian Languages for Researchers (3 cr.) Introduction to the structure of Swedish, Norwegian, and Danish necessary for reading, followed by critical reading in texts in the area of Scandinavian studies.

Courses in Swedish

GER–S 501 Beginning Swedish I (3 cr.) Development of communicative skills: listening comprehension, speaking, reading and writing in a cultural context. Introduction to grammar and vocabulary.

GER–S 502 Beginning Swedish II (3 cr.) P: S501 or equivalent. Further development of listening comprehension, speaking, reading and writing skills in Swedish. Introduction to Swedish literature and culture. Review of grammar and introduction to new grammatical topics.

Courses in Yiddish

GER–Y 501 Beginning Yiddish I (3 cr.) Introduction to the Yiddish language and selected aspects of Yiddish-language culture. Development of listening comprehension, simple speaking proficiency, controlled reading and writing skills.

GER–Y 502 Beginning Yiddish II (3 cr.) P: Y501 with grade of C– or higher or equivalent. Introduction to the Yiddish language and selected aspects of Yiddish-language culture. Development of listening

comprehension, simple speaking proficiency, controlled reading and writing skills.

GER–Y 503 Intermediate Yiddish I (3 cr.) P: Y502 or consent of instructor. Development of speaking, reading, writing, and listening skills. Review of basic grammar and study of new grammatical topics. Reading of short fictional texts and other writings on Jewish culture. Taught in alternate years.

GER–Y 504 Intermediate Yiddish II (3 cr.) P: Y503 or consent of instructor. Continuing development of active and passive skills. Additional new grammar concepts. Emphasis on development of reading skills and cultural knowledge through literary and journalistic texts, including texts in nonstandardized orthographies. Taught in alternate years.

GER–Y 505 Topics in Yiddish Literature (3 cr.)

GER–Y 506 Topics in Yiddish Literature (3 cr.)

GER–Y 815 Individual Readings in Yiddish Studies: Language, Literature, and Culture (1–4 cr.) Guided readings.

Courses for Graduate Reading Knowledge

GER–G 491 Elementary German for Graduate Students ((3 cr.) no grad. cr

GER–G 492 Readings in German for Graduate Students (3 cr.) no grad. cr

Center for the Study of Global Change

Departmental E-mail: global@indiana.edu

Departmental URL: www.indiana.edu/~global/academic.php

Graduate Minor Director

Hilary E. Kahn

Graduate Faculty

Courses which meet the criteria of the Ph.D. Minor in Global Studies are taught by faculty from across the university.

Ph.D. Minor in Global Studies

Conventional definitions of nations and even entire world regions as discrete and bounded systems are becoming increasingly blurred as profound and powerful trends transform the globe. The Ph.D. Minor in Global Studies enables the interdisciplinary study and critical analysis of issues and problems that transcend national boundaries and world areas such as global environmental sustainability, universal human rights, cyber security, transnational criminal organization, the study of the emergence of constitutional democracies in transitional societies, global humanities, minority linguistic and cultural right world-wide, and many other issues, topics, or problems of global interest.

Course Requirements

Each student's program is developed individually, in consultation between the student, the major advisor, and the director of the Ph.D. Minor in Global Studies. One core course, GRAD I701 Issues and Approaches to Global Studies, is required. Four additional elective courses, drawn from at least two different disciplines and reflecting a coherent and purposive thematic approach to the global issues or issues to be dealt with, will be selected, with the advice and approval of the advisors and the Global Studies Ph.D. Minor Advisory Committee. A capstone project—whether a specific course, an international internship, international field work, a substantial paper, or a question on the student's qualifying examination in the major department—completes the minor, for a minimum of 15 credit hours.

Foreign Language Requirement

To be an effective researcher and instructor in global affairs, minors should possess strong foreign language skills in at least one modern language. Minors must demonstrate foreign language competency at a level determined by the student's approved program of study. Testing will be administered by the appropriate foreign language department or area studies program.

Examinations

Although a 3.7 or higher GPA in Global Studies courses would normally exempt the student from having to take a written comprehensive examination, the final decision regarding a qualifying examination rests with the student's doctoral field advisor and the Global Studies Director. Students who opt for the qualifying examination to satisfy their capstone project are required to take a written comprehensive examination regardless of their GPA.

Ph.D. Minor in Human Rights

The Ph.D. Minor in Human Rights has four areas of emphasis. The minor is:

- GLOBAL. Its approach recognizes the discourse and practice of human rights have international, global, regional, and local components. The minor requires students explore the intersection of global and local contexts at the heart of human rights discourse.
- MULTIDISCIPLINARY. The minor takes a holistic and multidisciplinary approach, asking students to be aware of how law, cultural values and practice, social and political institutions, national and supranational bodies, and policy interact, integrate, and conflict with one another to create an international human rights regime and the discourse and practice surrounding it.
- APPLIED AND THEORETICAL. The program's approach is appropriate for students enrolled in the professional schools and in the humanities. It is applied as well as oriented to research and theory.
- CREATING AN INFRASTRUCTRE OF HUMAN RIGHTS STUDY. The minor allows students to access resources and learning opportunities in the form of a coherent and flexible program of study. Indiana University-Bloomington has faculty expertise in human rights research, students with research interests in human rights and resources, and courses devoted to the field of study. This minor will provide an opportunity to coordinate these assets in a consistent, integrated program.

Course Requirements

The Ph.D. Minor in Human Rights consists of five classes totaling fifteen credits. All students are required to take A Multidisciplinary Graduate Seminar in Human Rights

(I-705) and two classes totaling six credits from a list of core courses that privilege the learning objectives of the minor in their content. Two elective courses totaling six credits are also required. Elective courses have been determined in consultation with faculty who teach the courses and after review of class syllabi. By minor completion, students will have completed coursework in three academic areas beyond their own disciplines. Students are also allowed to request other course options, in consultation with their advisors and the Human Rights Minor Director.

I-705 Human Rights Multidisciplinary Graduate Seminar (3cr.)
The GRAD Gateway course will be offered through the Graduate School. It has a global focus and takes a multidisciplinary approach to the topic of human rights. This is in the process of being approved.

Required Core Course: Anthropology (3 cr.)

- Anthropology of Human Rights ANTH-E600

Required Core Course: Law (3 cr.)

(One of these two Law courses are required):

- International Human Rights LAW-B793
- Seminar in Human Rights LAW-L793

Two Electives (6 cr.) Selected from list available on minor website

Courses

Courses which meet the criteria of the Ph.D. Minor in Global Studies come from more than a dozen academic and professional schools. Sample courses are listed on the minor Web site. The Center for the Study of Global Change provides the core courses as well as special topics courses.

GRAD–I 705 Human Rights Multidisciplinary Graduate Seminar (3 cr.) This is the core course for the Ph.D. Minor in Human Rights. Like the minor, it emphasizes a global and multidisciplinary approach that is as theoretical as it is applied. The overall goal of this seminar is to help graduate students generate a framework for research and practice that investigates human rights and which incorporates various perspectives and complements students' disciplinary and regionally specific academic interests. The seminar is designed to stimulate students to think critically about a broad range of theoretical and methodological issues involved in human rights research, including ethics, legalities, relativism and universalism, the intersection of the global and local, and research concerns from different disciplinary perspectives.

Health, Physical Education, and Recreation

School of Health, Physical Education, and Recreation

Departmental E-mail: hper@indiana.edu

Departmental URL: www.hper.indiana.edu

Curriculum

Degrees Offered

Doctor of Philosophy in health behavior, leisure behavior, and human performance. There are five emphases under human performance: Adapted Physical Education, Biomechanics, Exercise Physiology, Motor Learning/Control, and Sport Management. In addition, the School of Health, Physical Education, and Recreation offers the following graduate degrees: Master of Science in Applied Health Science, in Kinesiology, and in Recreation; and Master of Public Health. For full information see the School of Health, Physical Education, and Recreation Bulletin.

Program Information

The Ph.D. is a research degree especially designed to prepare graduates for careers in fields devoted to the study of health behavior, human performance and leisure behavior. Specific emphases currently available in human performance include adapted physical education, biomechanics, exercise physiology, motor learning/control, and sport management. Other areas of study are also available for graduate degrees offered through the School of Health, Physical Education, and Recreation.

Special School Requirements

(See also general Graduate School requirements.)

Doctor of Philosophy

Admission Requirements

Applicants for the Ph.D. in health behavior, human performance, or leisure behavior must possess at least the equivalent of an undergraduate minor in the field of study to be pursued. Appropriate academic background in the physical, biological, and social and behavioral sciences is required. Prescribed deficiency work ordinarily cannot be counted among credit hours required for the degree. Other admission criteria are grade point averages earned in all undergraduate and graduate work, scores on the Graduate Record Examination General Test, and letters of recommendation from professors or others who are able to evaluate the applicant's potential for success in advanced graduate study. Admission applications can be completed online at www.gradapp.indiana.edu/.

Course Requirements

A minimum of 90 credit hours beyond the baccalaureate degree, of which at least 30 credit hours must be in the major area of emphasis. The remaining credit hours are to be distributed among the minor(s), supportive electives that include a substantial amount of work in statistics and research methodology, and dissertation (20-30 credit hours). Fifteen (15) credit hours excluding courses taken to complete the research and languages requirement are required outside of the student's major department.

Elective or minor course work must clearly support the development of research competency in the major field. Frequent involvement in research projects (with or without academic credit) is essential to the program. Deficiencies in course work must be removed during the first year of study.

All Ph.D. students must present T590 and T591, or their equivalents, as prerequisites to the major work.

Grades

All doctoral students must maintain a grade point average of at least 3.0 (B). Grades of C- (1.7) and below will be calculated in the student's grade point average, but

courses in which such grades are earned cannot be counted toward degree requirements.

Minor(s)

At least one minor in a supporting area outside the major department is required, which must be in a discipline related to, but distinct from, the major field(s) of study. The number of required credit hours is determined by the unit in which the minor is taken (usually 12-15).

Foreign Language/Research-Skill Requirement

A minimum grade of B (3.0) required in each course used to meet this requirement.

One of four options:

1. reading proficiency in two languages;
2. proficiency in depth in one language;
3. reading proficiency in one language plus an approved research skill;
4. other approved combination of research skills (9 credit hour minimum).

The option pursued must clearly enhance the student's ability to pursue research in the specific field of study and must have the approval of the student's advisory committee and the associate dean of academic program administration.
Research skills may be selected from, but are not limited to, areas such as computer science, mathematics, electronics, engineering, chemistry, and statistics.

Qualifying Examination

Written and oral; may not be taken until the student is within one course of completing all prescribed course work and the foreign language/research-skill requirement has been completed. Examination periods are regularly scheduled for September, February, and June. Applications must be filed at least 30 days in advance.

Research Proposal

The proposal meeting will be open to faculty and students in the university community. During the first portion the student will formally present her/his dissertation proposal in an open forum. Committee members and visitors will have the opportunity to ask questions. Visitors will leave after the formal presentation. The remaining time will be determined by the student's research committee.

Final Examination

Oral defense of the dissertation.

Ph.D. Minor

Doctoral students in other departments can complete a minor in a specific emphasis by satisfactorily completing 15 credit hours of graduate-level course work which has been approved by the minor field representative on the doctoral advisory committee. A qualifying examination is required.

Faculty

Dean

Robert M. Goodman*

Executive Associate Dean, Academic Affairs

Professor Jerry D. Wilkerson, Health, Physical Education, and Recreation Building 111; (812) 855-1561

Associate Dean, Global and Community Health

Lloyd Kolbe*

Associate Dean for Research

David Koceja*

Assistant Dean, Administration

David Skirvin

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Anita Aldrich* (Emerita), David Austin* (Emeritus), Herbert Brantley* (Emeritus), S. Kay Burrus (Emerita), David Compton*, John Cooper* (Emeritus), Donetta J. Cothran*, Jesus Dapena*, Theodore Deppe* (Emeritus), Ruth Engs* (Emerita), Alan Ewert*, Lawrence Fielding*, David L. Gallahue* (Emeritus), Leroy Getchell* (Emeritus), Kathleen R. Gilbert*, Robert M. Goodman*, Barbara Ames Hawkins*, Lynn Marie Jamieson*, James Klaunig*, David Koceja*, Lloyd J. Kolbe*, Bernard Loft (Emeritus), David K. Lohrmann*, Janet MacLean* (Emerita), Joel Francis Meier* (Emeritus), Tony Mobley* (Emeritus), James Peterson (Emeritus), John S. Raglin*, Mary Lou Remley* (Emerita), James Ridenour (Emeritus), Thomas Rillo* (Emeritus), Craig M. Ross*, Ruth Virginia Russell* (Emerita), John B. Shea*, James Skinner (Emeritus), Joel McCormick Stager*, Clinton Strong* (Emeritus), Paul Surburg* (Emeritus), Mohammad Rahim Torabi*, Janet Patricia Wallace*, Jerry Diana Wilkerson, William Lee Yarber*

Associate Professors

James Belisle (Emeritus), Robert Billingham*, Hobert Billingsley (Emeritus), Earl Blair*, James R. Brown (Emeritus), Ben Bruce Jr. (Emeritus), Donald Burns (Emeritus), Joseph S. Chen*, Shu Cole*, Nancy Theresa Ellis*, Alyce D. Fly*, Georgia C. Frey*, Gwendolyn A. Hamm, Doug H. Knapp*, Richard Lawson (Emeritus), Alice K. Lindeman*, W. Donald Martin* (Emeritus), Bryan P. McCormick*, Timothy D. Mickleborough*, Susan Elizabeth Middlestadt*, Cecilia Obeng*, Paul Pedersen*, Michael Reece*, Gary A. Sailes*, Dong-Chul Seo*, Nathan W. Shier* (Emeritus), Susan M. Smith*, Carrie Docherty Steele*, D. Dean Summers (Emerita), Sarah J. Young*

Assistant Professors

Cem Mehmet Basman, Zobeida Bonilla-Vega, H. Charles Chancellor, Galen E. Clavio, Jun Dai, Shingairai Feresu, S. Lee Hong, Jeanne Johnston*, Julia Knapp (Recreation and Parks Administration), Choong Hoon Lim*, Arthur Mindheim (Emeritus), Rasul A. Mowatt, Sam Newberg (Emeritus), Fernando Ona, Hilda Sherwin (Emerita), Marieka Van Puymbroeck*, Barbara Van Der Pol, Alison Voight, Jerad Yeagley (Emeritus), Ahmed Youssefagha

Clinical Professors

Catherine Grove, John Schrader (Kinesiology)

Clinical Associate Professors

G. Keith Chapin, Betty Haven (Emerita), Noy Kay, Catherine Sherwood-Laughlin

Clinical Assistant Professors

Phillip Henson, Joanne Klossner, Lesa Lorenzen-Huber, Maresa Janee Murray*

Lecturers

Trent Applegate, Robert Chapman

Assistant Scientists

Brian M. Dodge, Debra Herbenick

Academic Specialist

John Koenig, David Skirvin

Courses

Complete course listings for the Ph.D. in health behavior, human performance, and leisure behavior can be found in the School of Health, Physical Education, and Recreation Bulletin. For additional information, see also HPER Graduate Student Handbook.

History

College of Arts and Sciences

Departmental E-mail: gradsec@indiana.edu

Departmental URL: www.indiana.edu/~histweb

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, dual Master of Arts and Master of Library Science (jointly with the School of Library and Information Science), and Doctor of Philosophy

Program Information

The graduate program in history at Indiana University includes formal course work and opportunities for independent study in nearly all recognized fields, both chronological and geographical. Moreover, the department is strongly committed to interdisciplinary programs, and it works closely with area studies programs, journals, and historical organizations. The graduate program is designed to help students in the development of their knowledge and of their critical and analytical skills. Courses and programs in the Department of History prepare students for work as professional historians in a variety of settings: in public history, editing, librarianship, and government service, as well as in historical research and teaching at all levels.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission Requirements

(1) Bachelor's degree from a recognized institution, including 24 undergraduate credit hours in history, an overall undergraduate B (3.0) average, and a superior record in history; (2) at least one score above 600 on the Graduate Record Examination (GRE) General Test; (3) three letters of recommendation; (4) a personal statement concerning intellectual interests and professional aspirations; and (5) a sample of written work, such as a term paper, thesis, or any other piece of writing that indicates ability to communicate well in nonfiction prose. Ideally, a writing sample should also demonstrate the applicant's ability to conduct historical research. The History department discourages applicants who wish to pursue terminal M.A. degrees except in the case of the M.A./M.L.S, M.A.T. programs, and students wishing to pursue Ancient Language Study.

Grades

No grade below B– (2.7) in history courses will be counted toward this degree.

Course Requirements

A total of 30 credit hours; at least 20 of these credit hours must be in the Department of History. Students are required to complete H601 and at least one seminar and two colloquia; the remaining credit hours in history must be completed in graduate colloquia, seminars, or readings courses. Graduate students will be allowed to receive credit for undergraduate courses only in special cases (such as in the study of fields not commonly available at the undergraduate level, or in small fields).

Foreign Language Requirement

Reading proficiency in one of the following languages: Arabic, Chinese, French, German, ancient Greek, Italian, Japanese, Latin, Portuguese, Russian, Spanish, or another language appropriate to the student's program of study, if approved by the University Graduate School. Students may demonstrate proficiency by any of the three methods normally sanctioned by the University Graduate School or by passing a reading examination prepared by members of the history department faculty. The examination includes two texts of approximately 400 words each, one drawn from primary historical sources and the other typically drawn from historiographical sources. A student will be expected to translate the first text and answer critical questions about the second.

Field Review

M.A. candidates wishing to enter the Ph.D. program and those terminating their program with the master's degree must be recommended for the M.A. degree by the appropriate field committee. Graduate students who enter with an M.A. from another institution will be reviewed a year after pursuing graduate work at IU.

Master of Arts for Teachers Degree

Admission Requirements

Same as for the Master of Arts degree except that reading ability in a foreign language is not required.

Grades

No grade below B– (2.7) in history courses will be counted toward this degree.

Course Requirements

Requirements are a total of 20 or more credit hours in history and 36 credit hours in all courses. Students are required to complete H601 and at least one seminar and two colloquia; the remaining credit hours in history must be completed in graduate colloquia, seminars, or readings courses. Graduate students will be allowed to receive credit for undergraduate courses only in special cases (such as in the study of fields not commonly available at the undergraduate level, or in small fields). M.A.T. students are strongly encouraged to complete one of the pedagogy courses offered by the History Department: H580, H591, or H593.

Foreign Language Requirement

None.

Final Examination

None.

Dual Master of Arts and Master of Library Science Degrees

Study for these two degrees can be combined for a total of 50 credit hours rather than the 66 credit hours required for the two degrees taken separately. Students take 20 credit hours in history as outlined above under course requirements for the Master of Arts degree and 30 credit hours of library science. For specific requirements, see the entry for the School of Library and Information Sciences in the Indiana University Graduate Bulletin. Admission to each of the two areas of study is approved separately on the same basis as for other applicants not in the dual program.

Foreign Language Requirement

Reading proficiency in one of the following languages: Arabic, Chinese, French, German, ancient Greek, Italian, Japanese, Latin, Portuguese, Russian, Spanish, or another language appropriate to the student's program of study, if approved by the University Graduate School. Proficiency may be demonstrated by the means indicated under the heading "Foreign Language Requirement" in the section on the M.A. degree.

Doctor of Philosophy Degree

Admission Requirements

(1) Completion of the M.A. degree at Indiana University or another recognized institution, (2) a superior record in history, (3) certification in at least one foreign language, and (4) review and approval by a field committee consisting of faculty in the student's major field. For students with an M.A. degree from Indiana University, this review must take place by the end of a student's third semester of full-time graduate study; for other students, this review is done by a subcommittee prior to admission. For those with M.A. degrees from another institution, a writing sample, a personal statement and three letters of recommendation are required.

Grades

No grade below B– (2.7) in history courses will be counted toward this degree.

Course Requirements

The minimum course requirements for the Ph.D. degree are six colloquia (courses H600-H699) distributed in two or more fields, two seminars (courses H700-H799) taught by different instructors, one of which must be in the major field; H601 Introduction to the Professional Study of History during the first semester at IU; and courses to complete the outside minor. For those students transferring M.A. credits, a minimum of four colloquia and one seminar must be completed on the IU Bloomington campus. Students may take dissertation credits (H899) to fulfill the 90 credit hours required by the University Graduate School to complete the Ph.D. Students enrolled in the dual concentration program in cultural history must complete H680 and H780 in addition to the requirements listed above.

Foreign Language Requirement

The number and type of languages required will be determined by the student's major field of study. All students, regardless of field, must demonstrate proficiency in at least one foreign language. Several fields require students to demonstrate proficiency in additional languages; students should consult their advisors or the appropriate field chair for guidance. Students may demonstrate proficiency in the following languages: Arabic, Chinese, French, German, ancient Greek, Italian, Japanese, Latin, Portuguese, Russian, Spanish, or others appropriate to the student's program of study, if approved by the University Graduate School. Proficiency may be demonstrated by the means indicated under the heading "Foreign Language Requirement" in the section on the M.A. degree.

Qualifying Examination

(1) A rigorous oral examination of no longer than three hours will be required. The purpose of the examination is to demonstrate general command of the major and minor fields of study. The examination should assess students' scholarly preparation to teach courses in their fields through the demonstration of the ability to discuss key issues and problems in these areas. At least two representatives of the student's major field and at least one representative of his/her inside minor field must be present at the examination. The faculty representative for the student's outside minor has the option of participating or waiving participation. Students enrolled in the dual concentration in a time/place field and cultural history should have at least two representatives from the time/place field and two from the cultural history field on their examination committees. (2) There will be a public defense (open to all faculty and graduate students) of the student's dissertation prospectus, which the student's exam committee will preside over. The defense can take place as early as one week, but no later than six months, after the student passes the oral examination. Because the prospectus defense is meant to be an open forum, providing feedback from colleagues as well as the exam committee, then these defenses should normally be held during the academic year (fall and spring semesters) when the majority of faculty and students are available to participate. The prospectus will be distributed at least one week in advance of the defense. It should be substantial and should take the form of a grant proposal. It should explain the potential significance of the proposed

dissertation project and place it in historiographical context. Students must receive passing grades on both parts of the examination in order to advance to Ph.D. candidacy. The student's examination committee grades both parts of the examination.

Termination of Enrollment in the Doctoral Program

If a doctoral student fails the oral qualifying examination two times, falls below a 3.0 (B) grade point average, fails to meet the language requirement by the time 30 credit hours of post-M.A. credit have been earned, or fails to complete the oral qualifying examinations by the end of the approved length of time, the director of graduate studies, in consultation with the advisory committee, can initiate steps to terminate the student's enrollment in the program. The student, however, may make a formal appeal to be given a third chance to pass the qualifying examinations or to be given additional time to raise the grade point average or to complete the qualifying examination. If the appeal is denied, the director of graduate studies will recommend to the dean of the University Graduate School that the student's enrollment in the doctoral program be terminated.

Final Examination

Oral defense of dissertation.

Ph.D. Minor in History

Students in other departments may minor in history by completing, with a grade point average no lower than B (3.0), at least 12 credit hours of course work in history, including one colloquium. No more than 6 credit hours of work transferred from another university may be applied toward this requirement, and such credit must be approved by the director of graduate studies in the Department of History.

To arrange for a history minor, students should consult the director of graduate studies, who will recommend a member of the faculty to serve as an advisor. In consultation with the advisor, a program of study will be outlined and a copy of the plan filed with the director of graduate studies. Upon completion of the course work, the student should ask their history advisor or the director of graduate studies to attest to the successful completion of the outside minor.

Further information regarding departmental regulations governing advanced degree programs may be found in A Guide to Graduate Studies in History, available on from the department's graduate Web page: www.indiana.edu/~histweb.

Faculty

Chairperson

Professor Peter Guardino *

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Robert Ferrell* (Emeritus), Edward Grant* (Emeritus, History and Philosophy of Science), James C. Riley* (Emeritus, College of Arts and Sciences, Graduate School), Denis Sinor* (Emeritus, Central Eurasian Studies), David P. Thelen* (Emeritus)

Chancellor's Professor

John Edward Bodnar*

Robert F. Byrnes Professor

David L. Ransel*

Ruth Halls Professors

Phyllis Martin* (Emerita), Dror Wahrman*

Donald F. Carmony Chair

Eric T. Sandweiss*

Pat M. Glazer Chair

Mark Roseman*

Mendel Chair in Latin American History

Daniel James*

Alvin H. Rosenfeld Chair in Jewish Studies

Jeffrey Veidlinger*

Thomas and Kathryn Miller Professor

James H. Madison*

John W. Hill Associate Professor

Maria Bucur-Deckard*

Rudy Professor

Jeffrey Gould*

Sally Reahard Professor

Michael C. Grossberg*

Paul V. McNutt Professor

Michael Edward McGerr*

Professors

Judith Allen* (Gender Studies), George E. Brooks* (Emeritus), Jamsheed K. Choksy* (Central Eurasian Studies), Claude Andrew Clegg*, Nancy Demand* (Emerita), James Diehl* (Emeritus), Allen R. Douglas*, Ellen Dwyer* (Criminal Justice), Ben Eklof*, Jurgis Elisonas* (Emeritus, East Asian Languages and Cultures), Lawrence J. Friedman* (Emeritus), Wendy Gamber*, Jeffrey L. Gould*, Michael C. Grossberg*, Peter Francis Guardino*, Carl David Ipsen*, Daniel James*, George Juergens* (Emeritus), Herbert Kaplan* (Emeritus), Padraic Kenney*, Hiroaki Kuromiya*, Edward Linenthal*, James H. Madison*, Phyllis Martin* (Emerita), Michael Edward McGerr*, Howard Mehlinger* (Emeritus, Education), Klaus Muehlhahn*, Irene Neu* (Emerita), David Pace*, M. Jeanne Peterson* (Emerita), Alexander Rabinowitch* (Emeritus), David L. Ransel*, Mark Roseman*, Robert Schneider*, Bernard Sheehan* (Emeritus), Steven M. Stowe*(Emeritus), Lynn A. Struve* (Emerita), Jeffrey Veidlinger*, Dror Wahrman*, George M. Wilson* (Emeritus, East Asian Languages and Cultures)

Associate Professors

Maria Bucur-Deckard*, Ann G. Carmichael*, Nick Barry Cullather*, Arlene Diaz*, Konstantin Dierks*, Michael Sinclair Dodson*, Arthur Field*, John Henry Hanson*, Charles Jelavich* (Emeritus), Sarah Knott*, Matthias B. Lehmann*, Muriel Nazzari* (Emerita), John M. Nieto-Phillips*, Scott O'Bryan (East Asian Languages and Culture), Eric Robinson*, Eric T. Sandweiss*, Leah Shopkow*, Rebecca Spang*, Edward Jay Watts*

Assistant Professors

Christina Snyder, Deborah Deliyannis*, Jason McGraw, Krista Maglen, Marissa J. Moorman*, Michelle Moyd, Khalil G. Muhammad, Amrita Myers*, Julia Roos, Kirsten Sword, Ellen Wu, Pedro Machado

Adjunct Professors

David Brakke* (Religious Studies), Matt Christ* (Classical Studies), J. Albert Harrill* (Religious Studies), Edward Lazzerini (Central Eurasian Studies), Ajay Mehrotra (School of Law), Domenico Bertoloni Meli* (History and Philosophy of Science), Kathleen Myers* (Spanish and Portuguese), William Newman* (History and Philosophy of Science), David Nord* (Journalism), Toivo Raun* (Central Eurasian Studies), Michael Robinson* (East Asian Languages and Culture), Richard Rubinger* (East Asian Languages and Cultures), David Zaret* (Sociology)

Adjunct Associate Professors

Christopher Atwood (CEUS), Cynthia Bannon* (Classical Studies), Ajay Mehrotra (Law), Purnima Bose* (English), James Capshew* (History and Philosophy of Science), Robert Eno* (East Asian Languages and Cultures), Constance Furey* (Religious Studies), Helen Gremillion (Gender Studies), Matthew Guterl (African American and African Diaspora Studies), Owen Johnson* (Journalism)

Adjunct Assistant Professors

Lessie Jo Frazier* (Gender Studies), Luis Gonzalez (IU Library), Colin Johnson* (Gender Studies), Eden Medina* (Informatics), Ron Sela* (Central Eurasian Studies), Stephen Andrews (Journal of American History), Kevin Martin* (NELC)

Director of Graduate Studies

Edward J. Watts*, Ballantine Hall 742, (812) 855-8234

Courses

History Courses

Note: With the exception of students enrolled in the School of Education's M.A.T. in Social Studies program, and M.A./Ph.D. students majoring in Ancient History who take courses from the approved list below, the History department allows graduate students to take undergraduate courses only in special circumstances.

HIST–A 301 Colonial America (3 cr.)

HIST–A 302 Revolutionary America (3 cr.)

HIST–A 303 United States, 1789 to 1865 I (3 cr.)

HIST–A 304 United States, 1789 to 1865 II (3 cr.)

HIST–A 313 Origins of Modern America (3 cr.)

HIST–A 314 The United States, 1917–1945 (3 cr.)

HIST–A 315 United States since World War II (3 cr.)

HIST–A 317 American Social and Intellectual History (3 cr.)

HIST–A 325 American Constitutional History I (3 cr.)

HIST–A 326 American Constitutional History II (3 cr.)

HIST–A 329 Social History of American Enterprise I (3 cr.)

HIST–A 330 Social History of American Enterprise II (3 cr.)

HIST–A 337 The American Frontier I (3 cr.)

HIST–A 338 The American Frontier II (3 cr.)

HIST–A 339 History of the South I (3 cr.)

HIST–A 340 History of the South II (3 cr.)

HIST–A 345 American Diplomatic History I (3 cr.)

HIST–A 346 American Diplomatic History II (3 cr.)

HIST–A 347 American Urban History (3 cr.)

HIST–A 348 Civil War and Reconstruction (3 cr.)

HIST–A 352 History of Latinos in the United States (3 cr.)

HIST–A 353 American Economic History I (3 cr.)

HIST–A 354 American Economic History II (3 cr.)

HIST–A 355 Afro-American History I (3 cr.)

HIST–A 356 Afro-American History II (3 cr.)

HIST–A 361 Studies in American History for Teachers I (3 cr.)

HIST–A 362 Studies in American History for Teachers II (3 cr.)

HIST–A 364 History of Black Americans (3 cr.)

HIST–A 371 History of Indiana I (3 cr.)

HIST–A 372 History of Indiana II (3 cr.)

HIST–A 402 Readings in American Environmental History (3 cr.)

HIST–A 410 American Environmental History (3 cr.)

HIST–A 421 Topics in United States History (3 cr.) Intensive study and analysis of selected historical issues and/or problems in United States history. Topics will vary from semester to semester.

HIST–A 507 American Cultural History (3 cr.) Central topics in American cultural life and thought from the late nineteenth century to the present. Special focus on the changing sense of personal selfhood among specific ethnic and religious groups, social classes, genders, and professions. Examination of how this changing sense has manifested itself in cultural forms.

HIST–B 341 History of Spain and Portugal (3 cr.)

HIST–B 351 Western Europe in the Early Middle Ages (3 cr.)

HIST–B 352 Western Europe in the High and Later Middle Ages (3 cr.)

HIST–B 353 The Renaissance (3 cr.)

HIST–B 354 The Reformation (3 cr.)

HIST–B 355 Europe: Louis XIV to French Revolution (3 cr.)

HIST–B 356 French Revolution and Napoleon, 1763–1815 (3 cr.)

HIST–B 357 Modern France (3 cr.)

HIST–B 359 Europe from Napoleon to the First World War I (3 cr.)

HIST–B 360 Europe from Napoleon to the First World War II (3 cr.)

HIST–B 361 Europe in the Twentieth Century I (3 cr.)

HIST–B 362 Europe in the Twentieth Century II (3 cr.)

HIST–B 363 European Diplomatic History since 1870 I (2 cr.)

HIST–B 364 European Diplomatic History since 1870 II (2 cr.)

HIST–B 366 Paris and Berlin in the 1920s: A Cultural History (3 cr.)

HIST–B 377 History of Germany since 1648 I (3 cr.)

HIST–B 378 History of Germany since 1648 II (3 cr.)

HIST–B 383 European Intellectual History I (3 cr.)

HIST–B 383 European Intellectual History I (3 cr.)

HIST–B 391 Themes in World History (3 cr.)

HIST–B 393 German History: From Bismarck to Hitler (3 cr.)

HIST–B 421 Topics in European History (3 cr.)

HIST–B 568 Modern Italy (3 cr.) Risorgimento and unification; liberal Italy and the mutilated victory (WWI); Italian opera; Fascism; alliance with Nazi Germany and defeat (WWII); Christian Democrats vs. Communists; major cultural movements; the economic miracle; the Mafia; left- and right wing violence and terrorism; the kickbacks scandal and the Second Republic.

HIST–C 386 Greek History (3 cr.)

HIST–C 388 Roman History (3 cr.)

HIST–C 391 History of the Medieval Near East (3 cr.)

HIST–C 392 History of the Modern Near East (3 cr.)

HIST–C 393 Ottoman History (3 cr.)

HIST–C 394 Inner Asia before the Mongol Conquest (3 cr.)

HIST–C 580 History of Ancient Medicine (3 cr.) Covers the history of ancient medicine in Mesopotamia, Egypt, Greece (Homeric, Hippocratic, and Asclepian), China, India, Alexandria, and Rome (Soranus, Galen, and the medical service of the Roman army), and modern uses of humoral theory. Major focus is on the Hippocratic treatises as primary sources.

HIST–D 313 Russian Social and Cultural History, 1801–1917 (3 cr.)

HIST–D 314 Soviet Social and Cultural History (3 cr.)

HIST–D 401 History and Civilization of the Byzantine Empire I (3 cr.)

HIST–D 402 History and Civilization of the Byzantine Empire II (3 cr.)

HIST–D 418 Russian and Soviet Foreign Policy in the Twentieth Century (3 cr.)

HIST–D 419 The Mongols and Medieval Europe (3 cr.)

HIST–D 430 History of the Eastern and Southern Baltic Region (3 cr.)

HIST–D 506 Muscovy and Imperial Russia, 1500–1801 (3 cr.)

HIST–D 510 Russian Revolutions and the Soviet Regime (3 cr.)

HIST–D 521 Hungarian History and Civilization to 1711 (3 cr.)

HIST–D 522 Hungarian History and Civilization, 1711–1918 (3 cr.)

HIST–D 525 Path to Emancipation: Nationalism in the Balkans, 1804–1923 (3 cr.)

HIST–D 527 The People vs. The Emperor: Nation-Making and Imperial Decline in East Central Europe, 1780–1918 (3 cr.)

HIST–D 528 The Search for European Integration: Eastern Europe in the Twentieth Century (3 cr.)

HIST–E 531 African History from Ancient Times to Empires and City States (3 cr.) Origins and groupings of African peoples; political, social, and economic evolution to ca. 1750; Africa's contacts with the ancient world, trans-Sahara and Indian ocean trades; growth of states and empires; spread of Islam.

HIST–E 532 African History from Colonial Rule to Independence (3 cr.) The slave trade and its abolition; European imperialism and colonial rule; impact of Islam and Christianity; nationalism and the struggle for independence; reassertion of African culture and identity; development issues.

HIST–E 533 Conflict in Southern Africa (3 cr.) Early populations and environment; spread of European settlement, interaction with African societies and early race relations; Zulu power and white power; discovery of minerals and industrialization; urbanization and segregation; African and Afrikaner nationalism; south Africa and its neighbors; Mandela and the new South Africa.

HIST–E 534 History of Western Africa (3 cr.)

HIST–E 536 History of East Africa (3 cr.) Developments over the past two millennia in East Africa (Ethiopia, Somalia, Kenya, Uganda, Tanzania, Malawi, and northern Mozambique). Topics include the environment and peoples of the region, the emergence of hierarchical

societies, the economic and political changes of the nineteenth century, the era of European imperialism, the transformations associated with the colonial period, and African independence.

HIST–E 538 History of Muslim West Africa (3 cr.) Introduction to the history and historiography of Muslim West Africa; develops the origins of Islam in West Africa and the ways West Africans have incorporated, transformed, and amplified Muslim beliefs and practices throughout history.

HIST–F 342 Latin America: Evolution and Revolutions since Independence (3 cr.)

HIST–F 341 Latin America: Discovery, Conquest, and Empire (3 cr.)

HIST–F 432 Twentieth-Century Revolutions in Latin America (3 cr.)

HIST–F 536 Modern Central American History (3 cr.) Studies social, economic, cultural, and political development from 1821 to 1990. Major topics include coffee and liberalism, United States and Nicaragua, the era of reform, revolution and counterrevolution.

HIST–F 543 Modern Brazil since 1850 (3 cr.)

HIST–F 546 Modern Mexico (3 cr.) Places contemporary Mexico in historical perspective, focusing on the nineteenth and twentieth centuries. Topics include nineteenth-century social and political movements, the causes and consequences of the 1910 revolution, the formation of Mexico's political system, problems of economic growth, and the changing patterns of gender, class, and ethnicity in Mexican society.

HIST–G 465 Chinese Revolutions and the Communist Regime (3 cr.)

HIST–G 467 Traditional Japan (3 cr.)

HIST–G 468 Early Modern Japan (3 cr.)

HIST–G 567 Premodern Japan (3 cr.) Society and culture on the Japanese archipelago from their origins to the high middle ages. Prehistoric Jomon and protohistoric Yayoi. Formation of the Japanese state under the influence of Chinese and Korean models. Heian courtly culture. Ascendancy of military elites and developments in popular culture during Kamakura and Muromachi periods.

HIST–G 568 Early Modern Japan (3 cr.) Samurai culture, expansion of Buddhism, and sectarian violence. High feudalism, unification, and the Tokugawa settlement after 1600. Encounter with European civilization, closed country. Urbanization, social and cultural change, rise of agrarian prosperity in the Edo period to about 1800.

HIST–G 569 Modern Japan (3 cr.) Western impact and social and intellectual change in late Tokugawa Japan from about 1720. The Meiji Restoration. State capitalism and the Japanese development process. Empire, war, defeat, U.S. occupation, and renewal in the twentieth century. Japan's rise to the front rank of world economic powers after World War II.

HIST–G 580 Early China (3 cr.) China from its neolithic background through the Quin and Western Han dynasties. Examines the Shang tribal polity, royal and aristocratic phases of the Zhou state, and the creation of the imperial system in the Qin-Han period. Changing patterns of ideology, political legitimacy, and social organization through archaeological and textual sources.

HIST–G 582 Imperial China I (3 cr.) The Chinese empire from the Han through the Tang dynasties (second century B.C. through tenth century A.D.). Relations among demographic patterns, political forms, social classes, economic developments, religious movements, and cultural diversification, investigated through secondary and translated primary sources. Credit given for only one of G582 or G461.

HIST–G 583 Imperial China II (3 cr.) The Chinese empire from the Song through the middle Qing dynasties (tenth through eighteenth centuries A.D.). Relations among demographic patterns, political forms, social classes, economic developments, philosophical movements, and cultural diversification, investigated through secondary and translated primary sources. Credit given for only one of G583 or G461.

HIST–G 585 Modern China (3 cr.) Survey of the final century of dynastic rule and the rise to power of the Nationalist and Communist parties, highlighting social and cultural developments, the impact of Western imperialism, and the evolution of revolutionary ideologies. Credit given only for G585 or G462.

HIST–G 587 Contemporary China (3 cr.) Survey of recent Chinese history focusing on social, cultural, and political life in the People's Republic of China and post-1949 Taiwan. Events covered include the Long March, the Cultural Revolution, and the Tiananmen Square protests of 1989. Credit given for only one of G587 or G462.

HIST–H 425 Topics in History (1–3 cr.)

HIST–T 500 Topics in History (3 cr.) Intensive study and analysis of selected historical issues and problems of limited scope from the perspective of social and historical studies. Topics will vary but will ordinarily cut across fields, regions, and periods.

General and Professional Skills Courses

HIST–H 500 History of Historical Thought (4 cr.) Approaches to the historian's craft and reflections on history as a type of scholarly thinking. Recommended for new graduate students and others interested in history as a branch of knowledge. With the consent of the director of graduate studies, may be repeated for credit when the instructor differs.

HIST–H 501 Historical Methodology (4 cr.) Discussion and application of the various methods and strategies used in historical research.

HIST–H 509 Special Topics in European History (3 cr.) Study of special topics in history of Europe at graduate level. May be repeated once for credit.

HIST–H 511 Special Topics in United States History (3 cr.) Intensive study and analysis of selected topics in United States history. Topics will vary from semester to semester.

HIST–H 520 Shaping Careers in History (2 cr.) Introduces students to the history profession in order to facilitate planning of careers in the university and beyond.

Emphasis placed on the changing nature of careers inside and outside academia and ways students might construct a program of study to serve their professional goals.

HIST–H 521 Special Topics in African, Asian, or Latin American History (3 cr.) Intensive study and analysis of selected topics in African, Asian, or Latin American history. Topics will vary from semester to semester, e.g., traditional Asia, modern Asia, Latin American intellectual History.

HIST–H 523 The Holocaust (3 cr.) Intensive introduction to the historical events and intellectual developments leading up to and surrounding the destruction of European Jewry during World War II. The Holocaust will be examined against the backdrop of modern Jewish and modern German history.

HIST–H 524 Issues in Contemporary Historiography (4 cr.) Overview of the discipline of history. Focuses on understanding and placing in perspective current debates in the field. Topics vary, but attention will be paid in each case to overarching themes such as the differences between historical subfields and the overlaps and divergences between history and other disciplines.

HIST–H 540 Quantitative Methods in History (4 cr.)

HIST–H 541 Advanced Quantitative Methods (4 cr.)

HIST–H 542 Public History (4 cr.) The application of history to public needs and public programs. Historic preservation, archival management, oral history, editing, public humanities programming, historical societies, etc.

HIST–H 543 Practicum in Public History (1–4 cr.) P: H542. Internships in public history programs, field work, or research in the historical antecedents of contemporary problems.

HIST–H 546 History of Science, Medicine, and Technology (3 cr.) Study of topics in the history of science, medicine, and technology.

HIST–H 547 Special Topics in Public History (3 cr.) Intensive study and analysis of selected topics in public history. Topics will vary from semester to semester, e.g., to include historic preservation, material history, archival practice, and historical editing.

HIST–H 575 Graduate Readings in History (arr. cr.)

HIST–H 580 The Teaching of College History (1–2 cr.) Approaches to college-level instruction in history, either (1) through training to be an associate instructor, or (2) through work as a course assistant, assisting a faculty member in planning and teaching a 300- or 400-level history course. S/F grading.

HIST–H 591 Teaching World History (3 cr.) Introduction to the teaching of the undergraduate courses in world history. Topics include current curricula in world history; textbooks and other readings in world history; and multimedia resources. Students will prepare an undergraduate course syllabus of their own design.

HIST–H 592 Teaching World History Practicum (3 cr.) A first practical experience in teaching an undergraduate advanced topics course in world history. Topics are at the discretion of the student, but require authorization by the instructor and the Department of History. Students will have complete responsibility for the course taught.

HIST–H 593 Teaching United States History (3 cr.) Introduction to teaching undergraduate courses in United States History. Topics include: curricula in U.S. history, pedagogy in U.S. history, textbooks, and multimedia resources. Students will design two undergraduate course syllabi.

HIST–H 594 Teaching Unites States History II: Practicum (3 cr.) A first practical experience in teaching an undergraduate advanced topics course in United States history. Topics are at the discretion of the student, but require authorization by the instructor and the Department of History. The student will have complete responsibility for the course taught.

HIST–H 601 Introduction to the Professional Study of History (4 cr.) Introduces graduate students into the demands of the historical profession, introduces theory and methods of history, historiography, and fundamental research skills.

OS 500 Undistributed Overseas Study (0–30 cr.)

Colloquia

These colloquia are of seminar size and involve oral and written study of the problems, bibliographies, interpretations, and research trends in the fields with which they respectively deal; they are the chief means by which a student becomes knowledgeable in history at a professional level and prepares for the doctoral qualifying examination. Any of them may be taken more than once, upon approval of the student's advisory committee.

HIST–H 605 Colloquium in Ancient History (4 cr.)

HIST–H 610 Colloquium in Medieval European History (4 cr.)

HIST–H 615 Colloquium in Early Modern Western European History (4 cr.)

HIST–H 620 Colloquium in Modern Western European History (4 cr.)

HIST–H 630 Colloquium in British and British Imperial History (4 cr.)

HIST–H 640 Colloquium in Russian History (4 cr.)

HIST–H 645 Colloquium in East European History (4 cr.)

HIST–H 650 Colloquium in United States History (4 cr.)

HIST–H 661 Colloquium in History of Gender and Sexuality (4 cr.) Introduces students to the problems, bibliographies, interpretations, and research trends in the history of gender and sexuality. Topic varies.

HIST–H 665 Colloquium in Latin American History (4 cr.)

HIST–H 675 Colloquium in East Asian History (4 cr.)

HIST–H 680 Colloquium in Cultural History (4 cr.)

HIST–H 685 Colloquium in Near Eastern History (4 cr.)

HIST–H 695 Colloquium in African History (4 cr.)

HIST–H 699 Colloquium in Comparative History (4 cr.) Selected topics that cut across conventional geographic and chronological periods. May be used by thematic minors as one of the three colloquia required of Ph.D. candidates.

Seminars

These courses involve research at a mature level with primary sources in specialized topics and problems in the field with which they respectively deal. They train the student in historical scholarship. Any of them may be taken more than once, upon approval of the student's advisory committee.

HIST–H 705 Seminar in Ancient History (4 cr.)

HIST–H 710 Seminar in Medieval European History (4 cr.)

HIST–H 715 Seminar in Early Modern European History (4 cr.)

HIST–H 720 Seminar in Modern Western European History (4 cr.)

HIST–H 730 Seminar in British and British Imperial History (4 cr.)

HIST–H 740 Seminar in Russian History (4 cr.)

HIST–H 745 Seminar in East European History (4 cr.)

HIST–H 750 Seminar in United States History (4 cr.)

HIST–H 760 Seminar in History of Gender and Sexuality (4 cr.) Course involves research at a mature level with primary sources in specialized topics and problems in the history of gender and sexuality. It will train the student in historical scholarship in that area. May be taken more than once, upon approval of the student's advisory committee.

HIST–H 765 Seminar in Latin American History (4 cr.)

HIST–H 775 Seminar in East Asian History (4 cr.)

HIST–H 780 Seminar in Cultural History (4 cr.)

HIST–H 785 Seminar in Near Eastern History (4 cr.)

HIST–H 795 Seminar in African History (4 cr.)

HIST–H 799 Seminar in World History (4 cr.)

Thesis and Dissertation

These courses are eligible for a deferred grade.

HIST–H 898 M.A. Thesis (1–6 cr.)

HIST–H 899 Ph.D. Dissertation (arr. cr.)

HIST–G 901 Advanced Research (6 cr.)

History and Philosophy of Science

College of Arts and Sciences

Departmental E-mail: hpscdept@indiana.edu

Departmental URL: www.indiana.edu/~hpscdept

Curriculum

Degrees Offered

Master of Arts, dual Master of Arts and Master of Library Science (jointly with the School of Library and Information Science), and Doctor of Philosophy. Students at IU may also pursue double Ph.D.s with related departments, such as History or Philosophy, writing a single dissertation.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Guidelines

Either (1) an undergraduate major in a science or a related group of sciences with a minor in either history or philosophy or (2) an undergraduate major in either history or philosophy with a strong minor in science; or a similar background is preferred. Applicants with divergent backgrounds who can demonstrate serious interest and research potential in HPS are encouraged to apply.

Master of Arts Degree

Course Requirements

A total of 36 credit hours of course work or 30 credit hours of course work together with a satisfactory M.A. thesis. Students who do not write a thesis must choose at least one course which requires the writing of a major research paper. Both options require 24 hours of course work in the department; at least four courses must be selected from the core courses listed below (X506, X507, X551, X552, X556, X706). Students intending to take Ph.D. qualifying exams are advised to take more than the minimum number of core courses required for the M.A.

Grades

A 3.3 (B+) grade point average in departmental courses is required.

Foreign Language/Research-Skill Requirement

Proficiency in one language or one research skill. Students are typically expected to complete this requirement before registering for their third semester in the department.

Dual Master of Arts and Master of Library Science Degrees

Study for these two degrees can be combined for a total of approximately 51 credit hours rather than the 66 credit hours required for the two degrees taken separately. Students must take 21 credit hours in history and philosophy of science, including three core courses (X506, X507, X551, X552, X556, or X706). The course of studies must be planned in consultation with a history and philosophy of science advisor. Students must also complete 30 credit hours of School of Library and Information Science (SLIS) courses, including completion of SLIS MLS Foundation courses (15 credit hours); other required SLIS courses (9 credit hours); L516 or L586, L624, and L596 and SLIS elective courses. Admission to each of the two areas of study is approved separately on the same basis as for other applicants not in the dual program.

Doctor of Philosophy Degree

Fields of Study

A student may concentrate in either the history or the philosophy of science or pursue both fields simultaneously. This affects the Foreign Language/ Research Skill Requirement below.

Course Requirements

A total of 90 credit hours, including courses that meet all requirements for the M.A., plus at least two additional courses approved by the department from its offerings. Students intending to take Ph.D. qualifying exams are advised to take more than the minimum number of core courses required for the M.A. A maximum of 30 credit hours for dissertation work (X700 and X800) may be counted toward the 90 credit hours.

Minor

One minor outside the department is required. The requirements for this minor are set by the department involved. Outside minor fields that students in the history and philosophy of science program have commonly taken include history, mathematics, philosophy, or one of the sciences.

Foreign Language/Research-Skill Requirement

Proficiency either (1) in two languages, or (2) in one language and one research skill, or (3) in one language in depth, depending on the recommendation of the student's advisory committee. Students are normally expected to complete one of these requirements before their third semester in residence and the second-language or tool-skill requirement before their fifth semester.

Qualifying Examination

Written and oral. Examination in minor area is left to the discretion of the minor department. Examinations may not be taken more than twice, except in extraordinary cases.

Research Proposal

Upon advancement to candidacy, if not before, the student must submit and gain departmental approval of a research proposal.

Ph.D. Minor in History and Philosophy of Science

Graduate students from other departments desiring a minor in history and philosophy of science must complete 12 graduate credit hours of course work in the department with a B+ or higher. The set of courses should represent a coordinated objective and must be approved by the Director of Graduate Studies.

Faculty

Chairperson

Professor Domenico Bertoloni Meli*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

H. Scott Gordon* (Emeritus, Economics), Edward Grant* (Emeritus, History), William Royall Newman*

Professors

Colin Allen*, Domenico Bertoloni Meli*, Frederick Churchill* (Emeritus), Noretta Koertge* (Emerita), Elisabeth A. Lloyd*

Associate Professors

James H. Capshew*, Ann Carmichael* (History), Jordi Cat*, Sander Gliboff*, Jutta Schickore*

Assistant Professor

Amit Hagar*

Graduate Advisor

Associate Professor Sander Gliboff* Goodbody Hall 130, (812) 856-7417

Courses

Core Courses

HPSC–X 506 Survey of History of Science up to 1750 (3 cr.) Ancient, Medieval, Renaissance, and Enlightenment science.

HPSC–X 507 Survey of History of Science since 1750 (3 cr.) Growth of physical, biological, and social sciences during the nineteenth and twentieth centuries. Attention will be paid not only to the scientific contents but to the institutional and social context.

HPSC–X 551 Survey of the Philosophy of Science (3 cr.) Science claims to tell us what the world is like, even the part of the world we cannot see, and to explain why things happen the way they do. But these claims are controversial. Examination of competing models of scientific explanation and the ongoing debate over whether scientific theories should or even can be interpreted realistically.

HPSC–X 552 Modern Philosophy of Science (3 cr.) Origin and character of twentieth-century philosophy of science. Examination of the historical development of the philosophy of science-in interaction with parallel developments within the sciences themselves-from 1800 to the early twentieth century.

HPSC–X 556 History and Philosophy of Premodern Science (3 cr.) Historical survey of philosophical discussions of the nature of science, in the premodern period.

HPSC–X 706 Special Topics in the History and Philosophy of Science (2–4 cr.) Content and instructors will vary; students may thus receive credit more than once. Admission by consent of instructor or chairperson.

Seminars in History of Science

HPSC–X 601 Special Topics in Ancient Science (3 cr.) P: X506 or consent of instructor. The course deals with specific areas in science, philosophy, and technology within the chronological period stretching from 500 BCE to 500 CE. The focus will be texts, and in some instances, Latin or Greek may be required.

HPSC–X 602 Special Topics in Medieval and Renaissance Science (3 cr.) P: X506 or consent of instructor. The chronological scope of this course is roughly 500 to 1600 CE. Topics range over a broad spectrum, from the history of medieval and early modern technology to the emergence and development of the concept of natural magic.

HPSC–X 603 Special Topics in Early Modern Science (3 cr.) P: X506 or consent of instructor. Course will deal

with topics in the history of science and culture primarily during the 16th and 17th centuries.

HPSC–X 609 Special Topics in Modern Science (3 cr.) P: X507 or consent of instructor. Selected topics.

HPSC–X 705 Special Topics in the History of Science (2–5 cr.) Content and instructors will vary; students may thus receive credit more than once. Admission by consent of instructor or chairperson.

History and Philosophy of the Social and Behavioral Sciences

HPSC–X 682 Inductive Logic and Probability (3 cr.) Topics in inductive logic such as Hume's problem of induction, Hempel's paradox of confirmation (The Raven paradox), Goodman's new riddle of induction, and Bayesian confirmation theory. Analyses of concepts of probability, such as classical, propensity, frequency, and subjective (e.g., Bayesian) interpretations.

HPSC–X 755 Special Topics in the Philosophy of Science (2–5 cr.) Content and instructors will vary; students may thus receive credit more than once. Admission by consent of instructor or chairperson.

HPSC–X 756 Special Topics in the Philosophy of Science (2–5 cr.) Content and instructors will vary; students may thus receive credit more than once. Admission by consent of instructor or chairperson.

HPSC–X 795 Minds, Brains, and Computers (3 cr.) Philosophical issues in computer and cognitive science. Programming experience for beginners (in Mathematica). Turing machines and computation; computational theories of intelligence, consciousness, and vision; cellular automata and the behavior of complex systems; chaos theory and fractals; problem solving, search, and two-person games; knowledge representation and computer reasoning.

Seminar in History and Philosophy of Science

HPSC–X 521 Research Topics in the History and Philosophy of Science (1–3 cr.) Historical investigation of science to deepen understanding of issues arising in the philosophy of science, and application of philosophy of science to illuminate topics in the history of science. Focus may be on substantive historical and philosophical issues arising in a specific science (or cluster of related sciences), or on general methodological issues concerning the relationship between history of science and philosophy of science.

History of Philosopy and Modern Physical Science

HPSC–X 687 Seminar: Philosophical Problems of Chaos Theory (3 cr.) Philosophical examination of nonlinear dynamics and chaotic phenomena. Topics include: modeling, unpredictability and determinism, free will and chaos in psychology, implications for historical and social sciences, information and complexity.

HPSC–X 691 Seminar: Philosophical Problems of Space, Time, and Spacetime (4 cr.) P: X491 or consent of instructor. The direction of time; causal theory of time; intrinsic and extrinsic metrics; congruence in geometry and chronometry; spacetime in special and general relativity.

HPSC–X 790 Space, Time and Relativity of Theory (3 cr.) Topics in the philosophy of space, time, and space-time. Theory of motion and Zeno's paradoxes; St. Augustine on time; time and becoming; relational versus absolute theories of space and time; Mach's principle; introduction to Einstein's theory of relativity and space-time.

HPSC–X 791 Philosophical Issues in Quantum Theory (3 cr.) Examination of philosophical problems and challenges raised by quantum theory, with topics including Heisenberg uncertainty relations, nonlocality and EPR paradox, hidden variables, interpretations of quantum theory. No previous knowledge of quantum theory assumed.

History and Philosophy of the Life Sciences

HPSC–X 508 History of Biology (3 cr.) P: Junior standing or consent of instructor. Survey of the most important developments in biology from antiquity to the twenty-first century. Examination of such topics as changes in evolution theory, concepts of development and inheritance, instruments and the rise of the laboratory, and physiology.

HPSC–X 632 Seminar: Historical Problems in Evolutionary Biology (3 cr.) P: X325 or X408/X508 or consent of instructor. Historical examination of such topics as pre-Darwinism, Naturphilosophie, Darwin and The Origin of Species, rise of modern systematics, and concepts of race. Content will vary; students may receive credit more than once.

HPSC–X 693 Philosophy of Biology (3 cr.) Survey of the important concepts in biology from antiquity to the present. Emphasis on changes in evolution theory and concepts of development and inheritance. A familiarity with biology is helpful but not necessary.

Issues in Philosophy of Science

HPSC–X 642 History of Psychology (3 cr.) Explores the scientific, professional, and cultural dimensions of modern psychology, including its emergence as an academic discipline in the late nineteenth century. Focus on interpretive issues raised by recent scholarship.

HPSC–X 654 Seminar: Philosophy of the Social Sciences (4 cr.) P: X552 or consent of instructor. Examination of such topics as objectivity, generality, social laws, role of values in social inquiry, methodological individualism, and relation of the social sciences to psychology, operationism, behaviorism, and other reductivist proposals.

Science in Cultural Contexts

HPSC–X 301 Growth of Scientific Establishment (3 cr.) Please note: This course is not currently being offered.

HPSC–X 645 History of American Science (3 cr.) An historical exploration of the intellectual and institutional development of science in the United States from colonial times to the present. Examines recent scholarship in the history of American science and related historiographical trends and issues.

HPSC–X 670 Science and Gender (3 cr.) The role of science and technology in constructions of masculinity and femininity from 1600 to present. Historical and philosophical analysis of the interaction between science and technology and ideologies of gender. Evaluation of proposals for transforming science.

HPSC–X 671 Topics in the Science of Sex and Gender (3 cr.) P: May vary with topic. Possible topics include history of theories of sexuality, critique of current scientific concepts of sex and gender, philosophical perspectives on sexology, and the history of theories of sex evolution and determination. May be repeated twice for credit with different topic.

Cross-Listed Courses

Anthropology

- H500 History of Anthropological Thought in the Nineteenth and Twentieth Centuries (3 cr.)

English

- L769 Literature and Science (4 cr.)

Journalism

- J554 Seminar: Science Writing (3 cr.)

Sociology

- S660 Sociology of Science (3 cr.)

Individualized Study

- X600 Advanced Readings Course (cr. arr.)**
- X700 M.A. Thesis (cr. arr.)**
- X800 Ph.D. Thesis (cr. arr.)**

**These courses are eligible for a deferred grade.

History and Philosophy of the Biomedical Sciences (available from the Department of History and Philosophy of Science and the Department of History)

- A broad range of courses and seminars covering the history of medicine from antiquity to modern America are offered on a regular basis.

Logic Courses

- A variety of logic courses is regularly offered through the Philosophy and Mathematics departments. Students should consult the Philosophy Department's graduate bulletin for the most current list of logic courses offered for graduate credit.
- Ph.D. students in History and Philosophy of Science who wish to satisfy their research skills requirement in logic must consult with the director of graduate students in the Philosophy Department to determine which courses they may take to meet that department's formal logic requirement. Minimally, students must demonstrate a thorough understanding of first-order logic and take two graduate courses in logic broadly construed to include philosophy of mathematics and philosophy of language, of which at least one is in logic narrowly construed, i.e., involving formal methods and metatheory.

Human-Computer Interaction

School of Informatics and Computing

Departmental Email: informat@indiana.edu

Departmental URL: informatics.indiana.edu

Curriculum

Ph.D. Minor in Human-Computer Interaction (HCI)

Course Requirements for the Ph.D. Minor in HCI (12 credit hours)

The human-computer interaction minor requires 12 credit hours. Students must take a 3 credit hour introductory graduate course in HCI from INFO I541 Human-Computer Interaction Design I or S either from Informatics or SLIS S515 Introduction to HCI. In addition, students must take 9 credit hours from at least one department other than the student's home department. All topical seminar classes must be approved by the student's HCI advisor for application to the minor.

Grades

A minimum of B (3.0) is required in each course that is to count toward the minor.

Dissertation

The student's dissertation must address issues related to human-computer interaction.

Faculty

Director

Professor Erik Stolterman* (Informatics)

Steering Committee

Elizabeth Boling* (Education), C. Thomas Mitchell (Apparel Merchandising and Interior Design), Martin Siegel* (Informatics)

Core Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Curt Bonk* (Education), Katy Borner* (Library and Information Science), Jim Craig* (Psychology), Tom Duffy* (Education), Andrew Hanson* (Computer Science), Diane Kewley-Port* (Speech and Hearing Sciences), Annie Lang* (Telecommunications), David Leake* (Computer Science), Anne Massey* (Business), Bob Port* (Emeritus, Linguistics), Martin Siegel* (Informatics), Erik Stolterman* (Informatics), Dirk Van Gucht* (Informatics), Charles Watson* (Emeritus, Speech and Hearing Sciences)

Associate Professors

Eli Blevis* (Informatics), Elizabeth Boling* (Education), Hamid R. Ekbia (Library and Information Science), Julia Fox* (Telecommunications), C. Thomas Mitchell (Apparel Merchandising and Interior Design), John Paolillo* (Informatics), Gregory Rawlins* (Computer Science)

Assistant Professors

Jeffrey Bardzell* (Informatics), Shaowen Bardzell (Informatics), David Wild* (Informatics)

Courses

The range of courses offered is designed to enable students to construct a program for the Ph.D. Minor in HCI that is relevant to their primary research interests. Students taking topics classes must establish, to the satisfaction of the Steering Committee, the relevance of the subject matter to HCI when proposing the inclusion of such courses. Further courses will be added to or removed from the list on an ongoing basis at the discretion of the Steering Committee.

Business

- S601: MIS Research Topics in Applications Systems Design (3 cr.)
- S602: MIS Research Topics in Administration and Technology (3 cr.)

Computer Science

- A546 User Interface Programming (3 cr.)
- B581 Advanced Computer Graphics (3 cr.)
- B582 Image Synthesis (3 cr.)
- B665-B666 Software Engineering Management/ Implementation I-II (3 cr.)
- B669 Topics in Database and Information Systems (1-6 cr.)
- B689 Topics in Graphics and Human Computer Interaction (1-6 cr.)
- P565-566 Software Engineering I-II (3 cr.)

Education

- P544 Applied Cognition and Learning Strategies (3 cr.)
- P600 Topical Seminar in Learning Cognition and Instruction (3 cr.)

Health, Physical Education, and Recreation

- Y598 Ergonomics (3 cr.)
- Y599 Cognitive Ergonomics (3 cr.)

Informatics

- I545 Experience Design (3 cr.)
- I541 Interaction Design Practice (3 cr.)
- I543 Interaction Design Methods (3 cr.)
- I561 Form and Meaning in HCI (3 cr.)
- I590 Topics in Informatics: Visual Analytics (3 cr.)
- I590 Topics in Informatic: Interaction Culture (3 cr.)
- I590 Topics in Informatics: Computer Supported Cooperative Work (3 cr.)
- I601 Introduction to Complex Systems (3 cr.)
- I604 Human-Computer Interaction Design Theory (3 cr.)
- I690 Interaction Design Theory (3 cr.)

Library and Information Science

- S516 Introduction to HCI (or equivalent) (3 cr.)
- S561 User Interface Design for Information Systems (3 cr.)
- S637 Information Visualization (3 cr.)
- S652 Digital Libraries (3 cr.)
- S661 Concepts and Contemporary Issues in Human-Computer Interaction
- S662 Interface Design for Collaborative Information Spaces (3 cr.)
- L697 Advanced Topics in Information Systems (1-4 cr.)

Psychological and Brain Sciences

- P450 Human Factors (graduate credit awarded with extra assignments) (3 cr.)

Speech and Hearing Sciences

- S522 Digital Signal Processing (3 cr.)

Telecommunications

- T541 Processes and Effects: Individual Level Theory and Research. (3 cr.)
- T571 Applied Cognitive Emotional and Psychology Theory (3 cr.)
- T602 Seminar in Processes and Effects: The Information Processing of Media. (1-3 cr.)

Human Dimensions of Global Environmental Change

Center for the Study of Global Change

Departmental E-mail: global@indiana.edua

Departmental URL: http://www.indiana.edu/~cipec/hdgc/index.php

Curriculum

Ph.D. Minor in the Human Dimensions of Global Environmental Change

The graduate minor will instruct students in theories and methods that combine the physical and social sciences on human dimensions of global environmental change (HDGEC). The curriculum, as described below, will familiarize students with (1) the major issues of the field through exploration of the available approaches to this kind of interdisciplinary work and creation of a research proposal; (2) institutional analysis and design; and (3) forest and institutions research methods. Students will be expected to become familiar with GIS and/or remote sensing as tools in the analysis of global environmental change through both formal courses and hands-on apprenticeship as part of team research projects.

Course Requirements

The Minor in Human Dimensions of Global Environmental Change requires 12 credit hours of approved courses. The core courses G561, E622, and Y673 are required, unless explicitly approved otherwise by the directors of the Center for the Study of Institutions, Population, and Environmental Change and the University Graduate School. Students who have (1) completed the required credit hours in good standing and (2) presented a dissertation to their research committee, at least one member of which must be a core faculty member associated with the program, will complete the minor.

Faculty

Director

Associate Professor Tom Evans*

Core Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor and Rudy Professor

Emilio F. Moran* (Anthropology, Geography, Public and Environmental Affairs)

Distinguished Professor and Arthur F. Bentley Professor

Elinor Ostrom* (Political Science, Public and Environmental Affairs)

Professors

Eduardo Brondízio* (Anthropology), J.C. Randolph* (Public and Environmental Affairs)

Associate Professors

Tim Bartley* (Sociology), Tom Evans* (Geography), Vicky Meretsky* (Public and Environmental Affairs), Catherine Tucker* (Anthropology)

Assistant Professor

Rinku Roy Chowdhury* (Geography)

Associated Graduate Faculty

Professors

Randall Baker* (Emeritus, Public and Environmental Affairs, International Programs), Jerome Busemeyer* (Psychology), Chris Craft* (Public and Environmental Affairs), Hendrik Haitjema* (Public and Environmental Affairs), Jeffrey Hart* (Political Science), Dan Knudsen* (Geography), J. Scott Long* (Sociology), David Parkhurst* (Emeritus, Public and Environmental Affairs), Scott Robeson* (Geography), Rob Robinson* (Sociology), Barry Rubin* (Public and Environmental Affairs), Jeanne Sept* (Anthropology), James Walker* (Economics), Richard Wilk* (Anthropology)

Associate Professor

Heather Reynolds* (Biology)

Assistant Professors

Rebecca Lave* (Geography), Rich Phillips* (Biology), Todd Royer* (Public and Environmental Affairs)

Clinical Professor

Burnell C. Fischer* (Public and Environmental Affairs)

Academic Advisors

Associate Professor Tom Evans* (812) 856-4587 or (812) 855-2230; Rudy Professor Emilio Moran* (812) 855-6181; Arthur F. Bentley Professor Elinor Ostrom* (812) 855-0441

Courses

Core Courses

University Graduate School

GRAD–G 561 Seminar in Human Dimensions of Global Environmental Change (3 cr.) Introduction to issues in global environmental change (GEC), focusing on the human causes and consequences of biophysical transformations of Earth (mainly land) systems. Primary emphasis is on socioeconomic, political, institutional, and environmental dimensions of land-use and land-cover change; tropical forests, grasslands and urbanizing areas; international environmental regimes; spatially explicit methodologies and challenges in GEC research; and integrated approaches that treat land as a coupled human-environment system.

Anthropology

ANTH–E 622 TitleEmpirical Theory and Methodology: International Forest Resources and Institutions (3 cr.) This course trains participants in the International Forestry Resources and Institutions (IFRI) research program, which explores how communities influence local forest conditions. Theories of institutional analysis and human dimensions of environmental change underlie the course. Methods include participatory techniques, interviews, forest mensuration. Participants conduct fieldwork in an Indiana community.

Political Science

POLS–Y 673 Empirical Theory and Methodology (3 cr.) Will count toward Minor when topic is “Institutional Analysis and Development: Micro.” This research seminar addresses how and why fallible individuals achieve and sustain self-governing entities and self-governing ways of life. It seeks to understand how individuals affect the rules that structure their lives. This seminar provides the theoretical foundations for Y773.

Minor Elective Courses

University Graduate School

GRAD–G 513 Topics Seminar in Human Dimensions of Environmental Change (3 cr.) Topical courses related to the study of institutions, population, and environmental change will be arranged in light of recent scientific developments and student and faculty interests. Analysis of human roles in environmental change is contextualized by attention to biophysical and ecosys-tematic relationships.

GRAD–G 514 Fieldwork Practicum in Human Dimensions of Environmental Change (12 cr.) P: Approval from directors of the Center for the Study of Institutions, Population, and Environmental Change. Topical courses related to the study of institutions, population, and environmental change will be arranged in light of recent scientific developments and student and faculty interests. Analysis of human roles in environmental change is contextualized by attention to biophysical and ecosystematic relationships.

GRAD–G 517 Seminar in Cultural Ecology: The Amazon in Crisis: Ecology and Development (3 cr.) Provides an introduction to the ecology of the Amazon Basin of South America, focusing on its habitats, the use and conservation of the environment by its native

inhabitants, and examining the forces of development that threaten its very existence.

GRAD–G 590 Graduate status or consent from instructor. (3 cr.) Topic varies. Elective status depends on topic and approval by the academic advisors.

GRAD–G 591 Methods of Population Analysis and Applications (3 cr.) P: An undergraduate course in statistics. This is a course about methods of measuring and projecting population dynamics. We focus on describing the three basic demographic processes (mortality, fertility, and migration) and showing how each one affects population size and age structure. An understanding of these basic processes is fundamental for studying behavioral aspects of population change.

GRAD–G 593 International Perspectives on Population Problems (3 cr.) International trends in population growth, characteristics, and structure with attention to major social, environmental, economic, and political implications. Comparisons between industrially advanced economies and less developed countries in Latin America, Africa, and Asia. Special emphasis will be placed on local and national circumstances affecting fertility, mortality, migration, and emerging roles of population policies in development planning.

Anthropology

ANTH–E 427 Cultural Ecology (3 cr.) Surveys the major environmental studies in anthropology, the basic principles of ecological theory, and human adaptation as manifested in major ecosystems.

ANTH–E 527 Environmental Anthropology (3 cr.) Graduate course on theory and method in the study of human-environment interactions. Emphasis on contemporary debates and approaches and on research design in environmental research.

ANTH–E 600 Topic Seminar: Land-Use and Land-Cover Change (3 cr.) This course focuses on the relationship between land-use systems, human settlement patterns, and their impact on land cover and landscape structure. It aims to link the theoretical and methodological approaches that human ecology and landscape ecology bring to land use and production system analysis. The links between production system, land use, land cover, and landscape structure will be discussed in the context of contemporary problems, such as deforestation, agriculture intensification, and human dimensions of global environmental change.

ANTH–E 600 Topic Seminar: Remote Sensing for Social Scientists (3 cr.) This course combines a historical review on the use of remote sensing in the social sciences, conceptual discussions on applications of remote sensing to social science problems, and a formal introduction to remote sensing techniques based on hands-on laboratory sessions. The course will consist of a conceptual and a laboratory session each week.

ANTH–E 600 Topic Seminar: People and Forest: Contemporary Issues on Deforestation, Forest Management, and Agroforestry (3 cr.) The main goal of this seminar is to provide a semester-long "environment" in which the student's individual research interest (research paper, proposal, etc. related to "people and forest") can be "nurtured" and discussed with an interdisciplinary group of graduate colleagues. The goal is to work on a single research paper or dissertation proposal or dissertation chapter during the whole semester while interacting with colleagues in class.

ANTH–E 644 People and Protected Areas: Theories & Realities of Conservation (3 cr.) Explores major theories and approaches to conservation, from "fortress conservation" to community-based and participatory strategies. It considers the implications of protected areas for local human populations and cultural diversity. It evaluates outcomes and unintended consequences of protected areas, and controversies over the "best" way to protect natural resources.

Geography

GEOG–G 511 Sustainable Development Systems (3 cr.) P: G208 or consent of instructor. An examination of the notion of sustainable development and its meaning and implementation in the areas of resources, agriculture, water, transport, cities, and tourism. Also considers how such systems can be implemented in developed countries.

GEOG–G 520 Migration and Population Redistribution (3 cr.) P: G314 and G320, or consent of instructor. Study of international regional and intra-urban migration using micro- and macrolevel approaches, and the impacts of population redistribution on origin and destination. Topics include illegal immigration to the United States, rural-to-urban migration in LDCs, international migration and refugees, and gender differences in migration behavior.

GEOG–G 535 Introduction to Remote Sensing (3 cr.) P: G314 and G320, or consent of instructor. Principles of remote sensing of the earth and its atmosphere, emphasizing satellite data in visible, infrared, and microwave portions of the electromagnetic spectrum. Emphasis on practical applications and digital image analysis. A satellite data analysis project is required.

GEOG–G 536 Advanced Remote Sensing: Digital Image Processing (3 cr.) P: G535. Advanced remote sensing theory and digital image-processing techniques with an emphasis on environmental science applications. Hands-on computer exercises provide significant experience in digital image-processing techniques for extraction of qualitative and quantitative information about Earth's terrestrial and aquatic environments.

GEOG–G 538 Geographic Information Systems (3 cr.) P: . Overview of the principles and practices of geographic information systems (GIS). Spatial data models, database design, introductory and intermediate GIS, operations and case studies of real-world GIS applications. Laboratory exercises will provide significant hands-on experience. Lecture and laboratory. Taught every semester.

GEOG–G 539 Advanced Geographic Information Systems (3 cr.) P: G538 or consent of instructor. Intermediate and advanced topics in geographic information science and spatial analysis techniques using GIS software. This advanced course is for students who seek a greater understanding of this rapidly developing field and to learn how to construct, manage, and analyze their own GIS data and models. Taught once per year.

GEOG–G 639 Seminar in Geographic Information Science (3 cr.) Applications of geographic information

science principles in the collection and analysis of spatial data. Integration of GIS, remote sensing, and/or GPS technologies. Review of current literature on techniques, theory, technology, and applications with an emphasis on environmental issues. Discussions, laboratory, and research project. Taught every third semester.

Political Science

POLS–Y 669 International Relations: International Political Economy (3 cr.) Illustrative topics: international conflict, international organization, quantitative international relations, analysis and evaluation of policy making, U.S. foreign policy, Russian and Soviet foreign policy, international and comparative communism, international political economy.

POLS–Y 773 Empirical Theory and Methodology: Revisiting Collaborative Forest Communities in Indiana (3 cr.)

School of Public and Environmental Affairs

SPEA–E 465 Environmental Management in the Tropics (3 cr.) Historical examination of land use in tropical, non-Western cultures. Resource use in physical and cultural settings is explored through an interface with ecology, economics, and policy analysis. Common principles of analysis are used to help the students understand the cultural and historical dimensions of how people relate to their environment.

SPEA–E 518 Vector-Based Geographic Information Systems (3 cr.) Geographic information systems using vector data structure. Vector GIS capabilities and uses. Data structure and file management of spatial data. Laboratory exercises use ARC/INFO software.

SPEA–E 522 Urban Forest Management (2–3 cr.) Originally an outgrowth of aboriculture, urban forestry now encompasses the broader concepts of managing the trees, forests, and other natural recourses of cities for ecological, economic, and social benefits. Lectures, discussion, and field projects will be supplemented by outside speakers. (IUB and Bloomington will be the field laboratory.)

SPEA–E 527 Applied Ecology (3 cr.) P: One introductory-level ecology course. Ecosystem concepts in natural resource management. Techniques of ecosystem analysis. Principles and practices of ecological natural resource management.

SPEA–E 528 Forest Ecology and Management (3 cr.) P: E538 or V506. Field and laboratory exercises in quantitative analysis of forest ecosystems. Sampling and data collection methodologies. Data analysis and interpretation. Concepts in forest ecology and forest management.

SPEA–E 534 Restoration Ecology (3 cr.) P: E538 or V506. The course will cover basic concepts of ecosystem restoration, including development of energy flow and nutrient cycles, soil formation, mechanisms of species dispersal, and colonization and mutualistic relationships. Restoration of specific terrestrial and aquatic ecosystems, including grasslands, forests, lakes, rivers and streams, and wetlands, will be covered.

SPEA–E 555 Topics in Environmental Science: Sustainable Forestry (2–3 cr.) This class will review and discuss the science base for sustainable forestry, the human-dimensions interactions, and the political realities. The course format will be discussion-based with students leading the discussion on various assigned articles and publications. Each student will write and present several papers based on literature reviews and analyses.

SPEA–E 557 Conservation Biology (3 cr.) P: One 300-level ecology course. Ecological principles associated with rare species and with biodiversity, laws and statutes used to conserve biodiversity, and land and species management practices. Our aim is to understand scientific and political complexities of conservation biology and to study different methods used to conserve living resources and resolve conflicts associated with conservation.

Human Evolutionary Studies

College of Arts and Sciences

Departmental E-mail: toth@indiana.edu
Departmental URL: www.research.iu.edu/centers/craft.html

Curriculum

Admission Requirements

Students must be admitted to a Ph.D. program in the Department of Anthropology, the Department of Biology, the Department of Geological Sciences, the Department of Psychological and Brain Sciences, or other related department or program. They must also apply to the Program in Human Evolutionary Studies.

Program Information

Students should select an advisory committee made up of the two core faculty and at least one of the associate faculty members. For students whose home department is anthropology, at least one member of the advisory committee is expected to be from a department outside anthropology.

Ph.D. Minor in Human Evolutionary Studies

Course Requirements

The minor in human evolutionary studies requires four courses. Three of the four required courses are S510 The Archaeology of Human Evolution (3 cr.); S511 Seminar on Current Issues in Paleoanthropology (3 cr.) (Topics will vary; may be repeated for graduate credit); and ANTH B464 Human Paleontology (3 cr.).
The fourth required course will be chosen from the following: S512 Human Evolution and the Prehistory of Intelligence (3 cr.); S513 Modeling Human Evolution (3 cr.); or BIOL L505 Molecular Biology of Evolution (3 cr.).

Grades

A minimum of B (3.0) is required in each course that is to count toward the minor.

Faculty

Core Faculty

Professors

Kathy Schick* (Anthropology), Nicholas Toth* (Anthropology)

Associated Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Abhijit Basu* (Geological Sciences), Geoffrey Conrad* (Anthropology), Della Collins Cook* (Anthropology), Jesus Dapena* (Health, Physical Education and Recreation), Paul Jamison* (Emeritus, Anthropology), Robert Meier* (Emeritus, Anthropology), Emilio Moran* (Anthropology), Christopher Peebles* (Anthropology), Lisa Pratt* (Geological Sciences), Anne Pyburn* (Anthropology), Elizabeth Raff* (Biology), Rudolf Raff* (Biology), Jeanne Sept* (Anthropology), Julie Stout* (Psychology), Richard Wilk* (Anthropology)

Courses

Cross-Listed Courses

Anthropology
B464 Human Paleontology (3 cr.)

Biology
L505 Molecular Biology of Evolution (3 cr.)
L567 Evolution (3 cr.)

HVST–S 510 The Archaeology of Human Evolution (3 cr.) Overview of the Paleolithic (Old Stone Age) from 2.6 million years to 10,000 years ago. Focuses on the theory and method of reconstructing hominid behavior in the Stone Age. Course will take an evolutionary perspective, considering both biological and technological evolution.

HVST–S 511 Seminar on Current Issues in Paleoanthropology (3 cr.) Provides a forum for professional-level discussion of current reports on human evolution. Will often focus on one aspect or theme in human evolutionary studies.

HVST–S 512 Human Evolution and the Prehistory of Intelligence (3 cr.) Explores the different avenues of inquiry pertaining to the evolution of human intelligence from an archaeological and human paleontological perspective. Topics include technology, subsistence strategies, symbolic behavior, human paleontology, and paleoneurology (especially study of endocasts and fossil skulls).

HVST–S 513 Modeling Human Evolution (3 cr.) Explores the breadth of animal (mostly primate) models for human evolution. Areas for discussion include digestive physiology, bone density, language acquisition, locomotion, tool use, foraging, and social behavior. After a brief overview of theory and method in animal analogy, we will review animal models for the evolution of humans.

Human Sexuality

The Kinsey Institute for Research in Sex, Gender, and Reproduction and the Interdepartmental Graduate Committee on Human Sexuality

Departmental E-mail: kinsey@indiana.edu

Departmental URL: http://www.kinseyinstitute.org/

Curriculum

Ph.D. Minor in Human Sexuality

This minor is co-directed by the Kinsey Institute for Research in Sex, Gender, and Reproduction and the Interdepartmental Graduate Committee on Human Sexuality. The Human Sexuality Program offers a doctoral minor of 15 credits from related interdisciplinary subject areas. It is intended for students currently enrolled in a doctoral program, such as counseling, education, health behavior, psychology, or sociology. Students should select an advisor for this minor from members of the Interdepartmental Graduate Committee, listed above, or from affiliated faculty. One core course is required, with the remaining hours being selected, upon consent of the student's minor area faculty advisor, from other courses that have a major emphasis on sexuality and/or gender (example courses are listed below). The program provides a basic yet broad overview of human sexuality. The behavioral, biological, cultural, and social components of sexuality are examined, including the study of the role of sexuality in the arts and public policy. The program will be particularly useful for persons entering fields involving the social and behavioral sciences, education, health science and medicine, counseling and therapy, nursing, social work, humanities, criminal justice, and public policy.

Students interested in the Ph.D. Minor in Human Sexuality should check the Web site for current information about the minor, course offerings, and a list of affiliated faculty (www.kinseyinstitute.org/graduate/phminor.html). All students intending to complete the minor should contact Professor William Yarber, Health, Physical Education, and Recreation Building 142, (812) 855-7974 or Associate Scientist/Adjunct Associate Professor Erick Janssen, The Kinsey Institute, Morrison Hall 313, (812) 855-7686.

Faculty

Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Co-Chairpersons

Professor William Yarber* (Applied Health Science) and Associate Scientist and Adjunct Associate Professor Erick Janssen* (Kinsey Institute, Psychological and Brain Sciences)

Professors

Paul Gebhard* (Emeritus, Anthropology), Julia Heiman* (Psychological and Brain Sciences), Sumie Jones* (Emerita, Comparative Literature, East Asian Languages and Cultures), Noretta Koertge* (Emerita, History and Philosophy of Science), Jean Robinson* (Political Science), Stephanie Sanders* (Gender Studies/Kinsey Institute), David H. Smith* (Emeritus, Religious Studies), Beverly Stoeltje* (Anthropology), Virginia Vitzthum (Anthropology), Martin Weinberg* (Sociology), Colin Williams* (Sociology, Indiana University–Purdue University Indianapolis)

Associate Professors

Gracia Clark* (Anthropology), Stephanie Kane* (Criminal Justice), Michael Reece* (Applied Health Science)

Associate Scientist

Erick Janssen*, Morrison Hall 313, (812) 855-7686

Academic Advisor

Professor William Yarber*, Health, Physical Education, and Recreation Building 142, (812) 855-7974

Courses

Anthropology

ANTH–P 600 Seminar in Prehistoric Archaeology (3 cr.)

ANTH–E 600 Seminar in Cultural and Social Anthropology (3 cr.) May count toward minor when topic applies to human sexuality

ANTH–E 617 African Women (3 cr.)

Biology

BIOL–L 500 Independent Study (arr. cr.) May count toward minor when topic applies to human sexuality.

Communication and Culture

CMCL–C 626 Studies in Contemporary Communication (3 cr.) May count toward minor when topic applies to human sexuality.

Comparative Literature

CMLT–C 546 Sexuality and the Arts (3 cr.)

CMLT–C 574 Japanese-Western Studies (4 cr.) May count toward minor when topic applies to human sexuality.

CMLT–C 700 Research (arr. cr.) May count toward minor when topic applies to human sexuality.

Criminal Justice

CJUS–P 680 Seminar: Issues in Criminal Justice (3 cr.) May count toward minor when topic applies to human sexuality.

East Asian Languages and Cultures

EALC–E 500 Topics in East Asian Studies (2–4 cr.) May count toward minor when topic applies to human sexuality.

Education

EDUC–G 567 Introduction to Marriage and Family Counseling (3 cr.)

EDUC–G 672 Human Sexuality: An Introduction to Therapy (3 cr.)

Folklore

FOLK–F 750 Performance Studies (3 cr.) May count toward minor when topic applies to human sexuality.

Gender Studies

GNDR–G 600 Concepts of Gender (3 cr.)

GNDR–G 601 Survey of Contemporary Research in Gender Studies: The Social and Behavioral Sciences (3 cr.) May count toward minor when topic applies to human sexuality.

GNDR–G 602 Survey of Contemporary Research in Gender Studies: The Humanities (3 cr.) May count toward minor when topic applies to human sexuality.

GNDR–G 695 Survey of Contemporary Research in Gender Studies: The Humanities (3 cr.) May count toward minor when topic applies to human sexuality.

GNDR–G 701 Graduate Topics in Gender Studies (3–4 cr.) May count toward minor when topic applies to human sexuality.

Health, Physical Education, and Recreation

HPER–H 555 Issues in Human Sexuality and Health (3 cr.)

HPER–H 515 Human Sexuality Education in Schools (3 cr.)

HPER–H 540 Practicum in College Sex Education (3 cr.)

HPER–H 617 Sexual Health Research Seminar (3 cr.)

HPER–H 641 Readings in Health Education (1–5 cr.) May count toward minor when topic applies to human sexuality.

HPER–H 740 Research in Health Behavior (1–10 cr.) May count toward minor when topic applies to human sexuality.

History

HIST–H 575 Graduate Readings in History (arr. cr.) May count toward minor when topic relates to human sexuality.

HIST–H 610 Colloquium: Medieval European History (4 cr.) May count toward minor when topic relates to human sexuality.

History and Philosophy of Science

HPSC–X 600 Advanced Readings Course (arr. cr.) May count toward minor when topic relates to human sexuality.

HPSC–X 756 Advanced Readings Course (2–5 cr.) May count toward minor when topic relates to human sexuality.

Kinsey Institute

KINS–K 690 Sexual Science Research Seminar (1–3 cr.)

Law

LAW–B 753 AIDS and the Law (3 cr.)

Political Science

POLS–Y 657 Comparative Politics (3 cr.) May count toward minor when topic applies to human sexuality.

POLS–Y 675 Political Philosophy (3 cr.) May count toward minor when topic applies to human sexuality.

POLS–Y 681 Readings in Comparative Politics (1–4 cr.) May count toward minor when topic applies to human sexuality.

POLS–Y 689 Readings in Political Theory and Methods (1–4 cr.) May count toward minor when topic applies to human sexuality.

Psychological and Brain Sciences

PSY–P 657 Topical Seminar (3 cr.) May count toward minor when topic applies to human sexuality.

Religious Studies

REL–R 590 Directed Readings in Religious Studies (1–6 cr.) May count toward minor when topic applies to human sexuality.

Sociology

SOC–S 521 Sexual Diversity (3 cr.)

SOC–S 522 Constructing Sexuality (3 cr.)

SOC–S 526 The Sociology of Human Sexuality (3 cr.) Offered at Indiana University–Purdue University Indianapolis.

SOC–S 660 Advanced Topics (3 cr.) May count toward minor when topic applies to human sexuality.

SOC–S 700 Topical Seminar (3 cr.) May count toward minor when topic applies to human sexuality.

SOC–S 864 Readings in Sociology (arr. cr.) May count toward minor when topic applies to human sexuality.

SOC–S 866 Research in Sociology (arr. cr.) May count toward minor when topic applies to human sexuality.

India Studies

College of Arts and Sciences

Departmental E-mail: india@indiana.edu

Departmental URL: www.indiana.edu/~isp

Curriculum

Program Information

Modern India has more than a billion citizens, nearly 16 percent of the world's population. India today is a reflection of millennia of interaction and exchange across a wide spectrum of cultures and civilizations. Critical contemporary intellectual, political, and social issues—including security, social equality, economic and political development, and the role of historical relationships—are all being debated in India, and how these issues are addressed is of vital interest to the world community. The India Studies Program at Indiana University provides for the interdisciplinary study and critical analysis of the Indian subcontinent and its peoples from ancient times to the present.

The primary focus of the India Studies Program is on modern India. Yet in order to understand present-day India, it is important to have basic knowledge of the great periods in its history that have shaped modern India. This approach requires a sophisticated understanding of the country's highly developed arts, music, literature, drama, philosophy, religions, and social and political structures. In addition to providing an overall, comprehensive education about Indian civilizations, the program allows for more specialized work in (a) literary and performance studies, (b) philosophical and religious studies, and (c) social, political, and historical studies. The India Studies Program also offers beginning- and intermediate-level courses in several Indian languages. All students in the program are encouraged to take language classes, as well as to consider study abroad in India.

Ph.D. Minor in India Studies

Requirements: 12 credit hours, including the core, plus advanced work in one of the three disciplinary groups of the program (excluding language courses). Specific courses as well as language requirements (if any) should be chosen in consultation with the director of India Studies. Ordinarily, only 3 credits from the student's major program may be counted toward the Ph.D. minor.

Cooperative Programs

Students in the Ph.D. minor in India Studies are encouraged to take advantage of programs in India Studies and South Asian Studies at participating institutions in the Committee on Institutional Cooperation (CIC). Excellent work in the social sciences is available through the University of Chicago and the University of Wisconsin—Madison.

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Director

Sumit Ganguly*, Rabindranath Tagore Professor of Indian Cultures and Civilizations and Director, India Studies Program (Political Science)

Professors

Jamsheed Choksy* (Central Eurasian Studies), J. Clancy Clements* (Spanish & Portuguese, Linguistics), Sumit Ganguly* (Political Science), David L. Haberman* (Religious Studies), Jayanth Krishnan (Law), John Walbridge* (Near Eastern Languages and Cultures), Andrea Wiley (Anthropology)

Associate Professors

Michael Dodson* (History), R. Kevin Jaques* (Religious Studies), Paul Losensky* (Central Eurasian Studies, Comparative Literature), Rebecca Manring* (India Studies, Religious Studies), Radhika Parameswaran* (Journalism), Steven Raymer (Journalism), Susan Seizer* (Communication and Culture), Pravina Shukla* (Folklore and Ethnomusicology), Rakesh Solomon* (Theatre and Drama), Elliot Sperling* (Central Eurasian Studies), Arvind Verma* (Criminal Justice)

Assistant Professors

Rubiana Chamarbagwala (Economics), Nandini Gupta (Business), Pedro Machado (History), Richard Nance (Religious Studies), Ron Sela* (Central Eurasian Studies)

Lecturer

Sungok Hong (India Studies)

Librarian

Andrea Singer (IUB Libraries)

Academic Advising

Arnell Hammond, Memorial Hall East Room M21, (812) 855-6270

Courses

INST–I 500 Non-Western Theatre and Drama (3 cr.) Provides an overview of the great diversity of drama, dance, and theatre genres of India, looks at the influence

of Indian theatre on Western theatre artists, and serves as an introduction to Indian culture and society through its performing arts (Joint offering with Theatre and Drama T583).

INST–I 501 Elementary Sanskrit I (4 cr.) Introduction to Sanskrit, a classical language of ancient India. Basic grammatical structure and vocabulary in preparation for the reading of both secular and religious texts.

INST–I 502 Elementary Sanskrit II (4 cr.) Continuing introduction to Sanskrit. Basic grammatical structure and vocabulary in preparation for the reading of both secular and religious texts. Students will read a short epic Sanskrit piece.

INST–I 506 Beginning Hindi I (4 cr.) Introduction to the Hindi language through its writing system and basic grammar. Graded exercises and readings leading to mastery of grammatical structures and essential vocabulary. Development of reading and writing competence and simple conversations in contemporary Hindi. Classroom use of story books, tapes, and films in Hindi.

INST–I 507 Beginning Hindi II (4 cr.) Continuation of the first semester. Graded exercises and reading for mastery of grammatical structures and essential vocabulary. Composing short dialogues from the students' own environment. Reading, writing, and conversational skills are sharpened.

INST–I 508 Second-Year Hindi I (3 cr.) Focuses on reading such literature as mythology, folklore, and modern short stories and poetry, including several examples from Urdu literature. Students compose and perform their own dialogues based on the material read.

INST–I 509 Second-Year Hindi II (3 cr.) Promotes rapid reading skills and building vocabulary. Study of grammar is based on Hindi reading materials and includes regular grammar drills. Students sharpen composition skills by retelling stories from the reading material orally and in writing.

INST–I 546 Philosophies of India (3 cr.) Historical and critical-analytic survey of the major intellectual traditions of the cultures and civilizations of India. Attention to early philosophizing and the emergence of the classical schools in Hindu, Buddhist, and Jain traditions. Attention also to contemporary thought in India, including critical theory and subaltern theorizing.

INST–I 561 Intermediate Sanskrit I (3 cr.)

INST–I 562 Intermediate Sanskrit II (3 cr.)

INST–I 570 Literature of India in Translation: Ancient and Classical (3 cr.) Survey of the ancient and classical Sanskrit literatures of India in translation, presented in cultural context.

INST–I 571 Medieval Devotional Literatures of India (in translation) (3 cr.) Survey of medieval Indian devotional literature with reference to the various cultural milieus in which it was produced and its impact on and importance to Indian cultures today.

INST–I 580 Women in South Asian Religious Traditions (3 cr.) A historical view of the officially sanctioned roles for women in several religious traditions in South Asia, and women's efforts to become agents and participants in the religious expressions of their own lives.

INST–I 597 Sanskrit Religious Literature (3 cr.) Arranged tutorial readings from selected Indian religious texts in the original Sanskrit representing a variety of styles, periods, and religious traditions; includes selections from Hindu scriptures, religious epics, commentaries, religious law, hymns, philosophical texts, and Buddhist literature.

INST–I 605 Seminar on India Studies (3 cr.) Advanced research seminar on selected topics in India studies. Seminar may focus on specific texts, specific historical figures, basic themes, or issues in India studies.

INST–I 656 Graduate Readings in India Studies (1–6 cr.) Reading knowledge of Sanskrit and Hindi. Selected and substantive topics investigated from ancient, medieval, and modern texts about the civilization of India.

INST–L 500 Elementary Indian Languages I (3 cr.) Language instruction in the specific Indian language named in the schedule of classes. Various languages will be offered when available. These courses may be retaken for credit, but only in a language different from that of the first enrollment.

INST–L 550 Elementary Indian Languages II (3 cr.) P: L500 or equivalent in the same language. Language instruction in the specific Indian language named in the schedule of classes. Various languages will be offered when available. These course may be retaken for credit, but only in a language different from that of the first enrollment.

INST–L 560 Intermediate Indian Languages I (3 cr.) P: L550 or equivalent in the same language. Language instruction in the specific Indian language named in the schedule of classes. Various languages will be offered when available. These courses may be retaken for credit, but only in a language different from that of the first enrollment.

INST–U 506 Beginning Urdu I (4 cr.) Introduction to the Urdu language and basic grammar. Graded exercises and readings leading to mastery of grammatical structures and essential vocabulary. Simple conversations based on personal information, courtesy expressions, and greetings in contemporary Urdu. Classroom use of stories, tapes, films, and songs.

INST–U 507 Beginning Urdu II (4 cr.) P: U500 or equivalent proficiency. Continuation of the first semester. The writing system of Urdu and development of reading for mastery of grammatical structures and essential vocabulary. Composing short dialogues on everyday survival topics.

INST–U 508 Second Year Urdu I (3 cr.) P: U550 or equivalent proficiency. Urdu short stories, essays, poetry (gazals), dramas, newspapers, and magazine articles, etc., will be utilized for reading. Initiate basic communicative tasks related to daily activities and various situations.

INST–U 509 Second Year Urdu II (3 cr.) P: U510 or equivalent proficiency. Promotes rapid reading skills and vocabulary building. Study of grammar is based on Urdu reading material and includes regular grammar drills.

Students sharpen composition skills by retelling stories from the reading material orally and in writing. Increase speaking skills to initiate, sustain, and close a general conversation on a range of topics.

Cross-Listed Courses

Cross-Listed Courses

English
L774 Topics in International English Literature (4 cr.)

Folklore
F600 Asian Folklore and Folk Music (3 cr.)

History
H630 Colloquium in British and British Imperial History (4 cr.)
H730 Seminar in British and British Imperial History (4 cr.)

Political Science
Y657 Comparative Politics Topic: Ethnicity, Politics and Violence in South Asia (3 cr.)
Y669 The International Politics of South Asia (3 cr.)

Religious Studies
R547 Meditation Traditions of India (3 cr.)
R551 Religions of South Asia (3 cr.)
R597 Sanskrit Religious Literature (3 cr.)
R603 Seminar in Comparative Mysticism (3 cr.)
R604 Seminar in Cross-Cultural Philosophy of Religion (3 cr.)
R605 Seminar on India Studies (3 cr.)
R650 The Hindu Tradition (3 cr.)
R651 South Asian Buddhism (3 cr.)
R656 Buddhism in Central Asia (3 cr.)
R658 Materials and Methods in Buddhist Studies (3 cr.)

Theatre
T468 Non-Western Theatre and Drama (3 cr.)

Informatics

School of Informatics and Computing

Departmental E-mail: graduate@soic.indiana.edu

Departmental URL: soic.indiana.edu

Curriculum

Degrees Offered

The Doctor of Philosophy (Ph.D.) degrees in Informatics, and Computer Science,, the Ph.D. Minor in Informatics, and the Ph.D. Minor in Bioinformatics are offered through the University Graduate School.

In addition, the School of Informatics and Computing offers the Master of Science in Bioinformatics, the Master of Science in Chemical Informatics, the Master of Science in Computer Science, the Master of Science in Human-Computer Interaction Design, and the Master of Science in Security Informatics (see the School of Informatics and Computing graduate bulletin).

Ph.D. in Informatics

The Ph.D. in informatics provides a balance between technological, scientific, and social dimensions involved in the development and application of information technology.

Admission Requirements

Admission requirements in the areas of undergraduate grade point average and GRE score levels are those of the University Graduate School. The applicant must have some direct familiarity with computation.

For students planning to focus on bioinformatics or chemical informatics, a high level of computer programming competence is required. Students focusing in health informatics are expected to have a background in one of the health care professions. Students planning to specialize in social informatics or human-computer interaction should have familiarity with design principles and have some grounding in the social sciences.

For those who enter the Ph.D. program directly from their bachelor's program, there will be a formal assessment after two years of coursework, an "up or out" evaluation. Assessment will look at successful progression in the Ph.D. program with regards to progress toward completion of course requirements, maintenance of course grades and overall GPA according to Graduate School guidelines, and research, as measured by presentations at disciplinary meetings and publications. For those who wish to enter the Ph.D. program from their master's program, there will be an application process. In this case, there is a natural evaluation of the student's record. Upon matriculation, an advisor, which may be temporary, will be assigned to the applicant. This advisor will help guide the student to his or her intended focus until a full-time advisor is found.

Annual Review

Each year, students will be required to file an annual review with their advisor and program or dissertation committee. The review covers the period of the previous academic year and is due June 1. Four areas will be covered: coursework, research, teaching, and service. Written feedback will be provided by the student's advisor.

Course Requirements

A total of 90 credit hours are required. There are 27 required credits, which include I501, 6 credits of seminar work, 9 credits in 3 different subdisciplinary or 'breadth' areas, also called 'core' courses, 3 credits in professionalism and pedagogy (most likely taken as I600), and 6 credits of research rotation (I790). Students must take an additional 12 credits of theory and methodology courses applicable to the student's specialty. These courses can be taken inside or outside the school. Students must also take an additional 21 to 30 credits in elective coursework. The required Ph.D. minor is included in this category. The remaining 21 to 30 credits will be taken in dissertation credits.

No more than 30 hours may be counted from a master's degree taken at Indiana University or a graduate program at another university. (An additional 6 hours of master's thesis or capstone project may be counted toward the Ph.D. at the discretion of the student's program committee, assuming the thesis or capstone project is of sufficient research quality.)

Tracks of Study

Choices of fields offered for qualifying examinations must be approved by the Graduate Studies Committee. Tracks

of study currently proposed within the department are bioinformatics, chemical informatics, human-computer interaction, social informatics, complex systems, music informatics, security informatics, logic and mathematical foundations, and data discovery.

Minor

All students are required to have an appropriate minor approved by the University Graduate School. Minors will be selected with the advisor's recommendation. Some of the courses included in the minor may also count towards the student's methodology or other requirements.

Grades

An overall B (3.0) average for all Ph.D. courses in Informatics is required. A student whose cumulative grade point average falls below 3.0 for two consecutive semesters is subject to dismissal from the program.

Written Qualifying Examinations

All students will take a written qualifying examination that consists of a depth exam and a breadth exam. The qualifying examinations are described in a separate document. Examinations will be offered at the end of August and at the beginning of the second semester in January. Examinations must be completed by the beginning of the student's fourth year in the program but can be completed before that time when the core courses are completed. Students who do not successfully complete the examination can retake the exam a second time.

Oral Qualifying Examination

The oral qualifying examination covers in-depth knowledge of the student's primary research area. This examination is administered by the student's program committee. The qualifying examinations will normally be completed at the end of course work, before the student embarks on the dissertation. The student must pass this examination before passing on to candidacy.

Dissertation Proposal

The proposed research for the dissertation must be approved by the research committee and presented at a public colloquium in the school.

Final Examination

Oral defense of the dissertation.

Ph.D. Minor in Informatics

A minor in informatics requires 9 credit hours. The required 9 credit hours refer to any 3 graduate courses suitable for the student's research, to be decided by the student's advisor (in his or her department) and the Informatics graduate program director. Typically, these 3 graduate courses are chosen from the set of core courses available in the Informatics Ph.D. program.

Ph.D. Minor in Bioinformatics

Bioinformatics draws on knowledge and information from various fields such as biology, computer science, medicine, chemistry and physics. Students in relevant Ph.D. programs such as biochemistry and molecular biology, medical and molecular genetics, medicine, chemistry, or biology are the target audience for the Ph.D. minor in bioinformatics.

Requirements

A minor in bioinformatics requires 12 credit hours. The core curriculum consists of graduate level courses in informatics. Electives may be chosen based on personal interests from a broad list of courses in biology, chemistry, computer science, information science, and medical and molecular genetics. The graduate bioinformatics courses in the School of Informatics and Computing assume a minimal knowledge of cell and molecular biology. That level of understanding could be gained with at least 6 undergraduate credit hours in molecular biology, genetics, or evolution.

Faculty

Dean

Robert Schnabel*

Associate Dean for Graduate Studies and Research

Geoffrey C. Fox*

Associate Dean for Faculty Affairs

David Leake*

Director of Graduate Studies, Informatics

Martin Siegel*

Director of Graduate Admissions

Mike Gasser*

Director of Ph.D. Graduate Studies, Computer Science

Predrag Radivojac*

Director of M.S. Graduate Studies, Computer Science

Mehmet M. Dalkilic*

Director of Graduate Administration

Patricia Reyes-Cooksey

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

J. Michael Dunn* (Emeritus), Geoffrey Fox*, David James Hakken*, Michael McRobbie*, Christine Ogan* (Emerita), Edward Robertson* (Emeritus), Martin Siegel*, Erik Stolterman*, Peter Todd*, Alessandro Vespignani*, Larry Steven Yaeger*

Associate Professors

Eli B. Blevis*, L. Jean Camp*, Mehmet M. Dalkilic*, Dennis P. Groth*, Esfan Haghverdi, Sun Kim*, Filippo Menczer*, John Paolillo*, Christopher S. Raphael*, Luis M. Rocha*

Assistant Professors

Jeffrey Bardzell*, Shaowen Bardzell, Alessandro Flammini*, Matthew Hahn*, Eden Medina*, Steve Myers*, Predrag Radivojac*, Kalpana Shankar*, Haixu Tang*, XiaoFeng Wang*, David Wild*, Yuqing (Melanie) Wu*, Yuzhen Ye

Courses

INFO–I 601 Introduction to Complex System (3 cr.) P: MATH M118, INFO I201, or equivalent course. The course will cover fractals, emergent behavior, chaos theory, cooperative phenomena, and complex networks. Students will learn how to think differently about complex realities, finding ways to understand their complexity and addressing the problems they pose.

INFO–I 604 Human Computer Interaction Design Theory (3 cr.) The course will explore, analyze and criticize underlying assumptions and the rationale behind some of the most influential theoretical attempts in HCI and related fields. The purpose of the course is to make students aware of how theories can influence practice and to develop critical thinking around the role, purpose, and function for theories.

INFO–I 605 Social Foundations of Informatics (3 cr.) Topics include the economics of information businesses and information societies, legal and regulatory factors that shape information and information technology use, the relationship between organization cultures and their use of information and information technology, and ownership of intellectual property.

INFO–I 611 Mathematical and Logical Foundations of Informatics (3 cr.) P: Basic Discrete Mathematics equivalent to MATH M 118, or consent of instructor. An introduction to mathematical methods for information modeling, analysis and manipulation. Topics include proof methods in mathematics, models of computation, counting techniques and discrete probability, optimization, statistical inference and more advanced topics that include but are not limited to Markov chains and random walks, random graphs, and Fourier analysis.

INFO–I 617 Informatics In Life Sciences and Chemistry (3 cr.) Introduces the fundamental notions in genome and proteome informatics and chemical informatics, focusing on the design and organizing issues in information systems used in those areas. The course is designed for students with no biology or chemistry background, but some knowledge in informatics, who want to learn basic topics in bioinformatics and chemical informatics.

INFO–I 651 The Ethnography of Information (3 cr.) *This course is currently not being offered.

INFO–G 901 Advanced Research (6 cr.)

INFO–I 500 Fundamental Computer Concepts for Informatics (3 cr.) An Introduction to fundamental principles of computer concepts for Informatics study, including an overview of computer architecture, computer algorithms, fundamentals of operating systems, data structure, file organization and database concepts. INFO I500 is expected to impart the required level of competency in computer science. This course may be waived in lieu of six undergraduate credit hours of computer science or informatics coursework, covering areas of programming, discrete structures, and data structures

INFO–I 501 Introduction to Informatics (3 cr.) P: Graduate standing. Basic information representation and processing; searching and organization, evaluation and analysis of information. Internet-based information access tools; ethics and economics of information sharing.

INFO–I 502 Informatics Management (3 cr.) P: Computer science course 300 level or higher. Survey of data management issues in medical, health, chemical and biology related areas; basic techniques of physical database structures and models, data access strategies, management and indexing of massively large files.

INFO–I 504 Social Dimensions of Science Informatics (3 cr.) Examines ethical, legal, and social issues surrounding contemporary research and practice in science informatics. Topics include the nature of science and technology, the ramifications of recent advances in science informatics, and relevant science policy and research ethics. General knowledge of science informatics is assumed.

INFO–I 506 Globalization and Information (3 cr.) Explores the processes that promote and impede movement of human action and informational activities to the most general levels, e.g., the level of the world as a whole. Surveys diverse theories of globalization to identify the best approaches for professional informatics career planning and making information globally accessible.

INFO–I 519 Introduction to Bioinformatics (3 cr.) P: One semester programming course or equivalent. Sequence alignment and assembly; RNA structure, protein and molecular modeling; genomics and protenomics; gene prediction; phylogenic analysis; information and machine learning; visual and graphical analysis bioinformatics; worldwide biologic databases; experimental design and data collection techniques; scientific and statistical data analysis; database and data mining methods; and network and Internet methods.

INFO–I 520 Security for Networked Systems (3 cr.) This course is an extensive survey of system and network security. Course materials cover the threats to information confidentiality, integrity and availability and the defense mechanisms that control such threats. The course provides the foundation for more advanced security courses and hands-on experiences through course projects.

INFO–I 521 Malware Epidemic: Threat and Defense (3 cr.) This course is designed to be research and hands-on oriented. Students are required to read and present research papers that reflect the state of the art in malware-related research and participate in course projects that expose them to the cutting-edge technologies on malware defense.

INFO–I 525 Organizational Informatics and Economic Security (3 cr.) Security technologies make explicit organizational choices that allocate power. Security implementations allocate risk, determine authority, reify or alter relationships, and determine trust extended to organizational participants. The course begins with an introduction to relevant definitions (security, privacy, trust) and then moves to a series of timely case studies of security technologies.

INFO–I 529 Machine Learning in Bioinformatics (3 cr.) P: INFO I519, or equivalent knowledge. The course covers advanced topics in Bioinformatics with a focus on machine learning. The course will review existing

techniques such as hidden Markov models, artificial neural networks, decision trees, stochastic grammars, and kernel methods. Examine application of these techniques to current bioinformatics problems including: genome annotation and comparison, gene finding, RNA secondary structure prediction, protein structure prediction, gene expression analysis, proteonmics, and integrative functional genomics.

INFO–I 530 Seminar in Health Informatics Applications (3 cr.) P: Graduate standing. This course examines the basic concepts of the design, evaluation, and use of interactive applications in health informatics.

INFO–I 531 Seminar in Health Informatics (1–3 cr.) P: Graduate standing. Variable topic. Emphasis is on advanced topics and research in health informatics. Can be repeated once with a different topic, subject to approval of the program director.

INFO–I 532 Seminar in Bioinformatics (1–3 cr.) P: Graduate standing. Variable topic. Emphasis is on advanced topics and research in bioinformatics. Can be repeated with different topics, subject to approval of the Dean.

INFO–I 533 Systems & Protocol Security & Information Assurance (3 cr.) This course looks at systems and protocols, how to design threat models for them and how to use a large number of current security technologies and concepts to block specific vulnerabilities. Students will use a large number of systems and programming security tools in the laboratories.

INFO–I 534 Seminar in Human-Computer Interaction (1–3 cr.) P: Graduate standing. Variable topic. Emphasis is on advanced topics and research in human-computer interaction. Can be repeated once with a different topic, subject to approval of the program director.

INFO–I 536 Foundational Mathematics of Cybersecurity (3 cr.) P: Knowledge of undergraduate level probability, lined algebra or calculus. Students will learn mathematical tools necessary to understand modern cyber security. The course will cover introductory mathematical material from a number of disparate fields, including probability theory, computational theory, complexity theory, group theory, and information theory.

INFO–I 537 Legal and Social Informatics of Security (3 cr.) This is a case-based course on privacy and security in social contexts. Cases will particularly address the specific designs of technologies (e.g., P3P, PICS) and discuss how different technically feasible design choices would result in distinct regulatory regimes, business strategies, or support different forms of social interaction. This course will focus on specific security and privacy technologies as socio-technical systems.

INFO–I 538 Introduction to Cryptography (3 cr.) Introduction to the foundational primitives of cryptography and implementations. A primary goal of this course will be to understand the security definitions for each primitive, and how they are used in cryptographic protocols. The ethics of insecure or on-the-fly protocol design will be discussed.

INFO–I 539 Cryptographic Protocols (3 cr.) Provides a basic understanding of computer security by looking at how things go wrong and how people abuse the system. Once it is understood how computer systems are attacked, it is possible to propose ways to make the system secure.

INFO–I 541 Interaction Design Practice (3 cr.) Human-Computer Interaction Design (HCID) describes the way a person or group accomplishes tasks with a computer - what the individual or group does and how the computer responds; what the computer does and how the individual or group responds. Sometimes known as “interface design,” HCID becomes increasingly important as computing intelligence and connectivity spread ubiquitously to home, work, and play environments. This course will be organized around a collection of readings and three design projects concerned with applying human-computer interaction principles to the design, selection, and evaluation of interactive systems.

INFO–I 542 Foundations of Human Computer Interaction (3 cr.) Offers a survey overview of the field of Human-Computer Interaction Design. It introduces the main themes of HCI set generally in a historical context. Themes include interaction design, cognitive modeling, distributed cognition, computer-supported cooperative work, data, visualization, ubiquitous computing, affective computing, and domestic computing, among others.

INFO–I 543 Interaction Design Methods (3 cr.) Students will learn basic concepts and methods for usability studies and evaluation of interactive systems as well as apply those methods to actual system design evaluations. This course is not only for understanding the basics and traditional approaches in this area, but also for exploring new ways of evaluating the usability of state-of-the-art technology-based systems such as systems in ubiquitous computing, CSCW, tangible and social computing areas.

INFO–I 545 Music Information Representation, Search, and Retrieval (3 cr.) P: Major, minor, or outside area standing in music informatics or music information technology. A comprehensive, comparative study of computer-based representation schemes for music, including those oriented toward music notation, music performance, and music analysis. Overview of musical metadata. Techniques and tools for search and retrieval of music information. Credit not given for both INFO I545 and MUS N564.

INFO–I 546 Music Information Processing: Symbolic (3 cr.) This course deals with both methodology and specific applications that attempt to algorithmically annotate, understand, recognize, and categorize music in symbolic (score like) form. Particular applications will include key finding, harmonic analysis, note spelling, rhythm recognition, meter induction, piano fingering, and various classification problems such as genre or composer identification. The methodology we will employ will be probabilistic and will include ideas from Machine Learning such as optimal classifiers, hidden Markov models, and Bayesian Networks. Students will have computing assignments, present papers, and be expected to implement solutions to problems using a high-level language such as R or Matlab.

INFO–I 547 Music Information Processing: Audio (3 cr.) This course deals with various music analysis and processing problems that use sampled audio as the primary data representation. Discusses digital signal processing, including filtering and its relationship to

Fourier techniques. Topics include synthesis, effects processing, score following, blind music recognition, and accompaniment systems.

INFO–I 548 Introduction to Music Informatics (3 cr.) P: Solid understanding of music fundamentals; music theory background recommended. History, issues, and applications in music information technology. Survey of various types of musical information. Introduction to digital musical media, including data standards and processing; database structure and organization standards and processing; database structure and organization of audio-, score-, and text file objects; and discussion of copyright issues

INFO–I 561 Mean and Form in HCI (3 cr.)

INFO–I 571 Chemical Information Technology (3 cr.) P: Consent of instructor. Overview of chemical informatics techniques, including chemical structure coding, chemical data representation, chemical database and search systems, molecular visualization and modeling techniques, and the development of chemical informatics software.

INFO–I 572 Computational Chemistry and Molecular Modeling (3 cr.) P: INFO I571. Computer models of molecules and their behavior in gas and condensed phases; implicit and explicit solvation models; quantum and molecular mechanics; search strategies for conformational analysis, geometry optimization methods; information content from Monte Carlo and molecular dynamics simulations; QSAR; CoMFA; docking.

INFO–I 573 Programming for Science Informatics (3 cr.) Students will receive a thorough understanding of software development for chem- and bioinformatics, and broaden experience of working in a scientific computing group. Topics include programming for the web, depiction of chemical and biological structures in 2D and 3D, science informatics tool kits, software APIS, AI and machine-learning algorithm development, high performance computing, database management, managing a small software development group, and design and usability of science informatics software.

INFO–I 585 Bioinspired Computing (3 cr.) Biologically-inspired computing is an interdisciplinary field devoted to computational methods modeled after natural design principles. The goal is to produce informatics tools with enhanced robustness, scalability, flexibility and natural human-machine interaction. Topics include: Self-organization, Evolutionary Systems, Cellular Automata, Boolean Networks, L-Systems, Collective and Swarm Behavior, Artificial Immune Systems, Complex Networks.

INFO–I 586 Artificial Life (3 cr.) Artificial life is a broad discipline encompassing the origins, modeling, and synthesis of natural and artificial living entities and systems. Artificial intelligence, as a discipline, tries to model and understand intelligent systems and behavior, typically at the human level.

INFO–I 590 Topics in Informatics (1–3 cr.) P: Graduate standing. Variable topic. Emphasis is on new developments and research in informatics. Can be repeated with different topics, subject to approval of the Associate Dean for Graduate Studies.

INFO–I 591 Graduate Internship (0–6 cr.) P: Approval required. Students gain professional work experience in an industry or research organization setting, using skills and knowledge acquired in Informatics course work.

INFO–I 602 Music Information Processing: Audio (3 cr.) This course deals with various music analysis and processing problems that use sampled audio as the primary data representation. Digital signal processing including filtering and its relationship to Fourier techniques. Focus on applications including score following, automatic music transcription and annotation from audio, musical accompaniment systems, as well as some useful audio effects.

INFO–I 609 Advanced Seminar I in Informatics (3 cr.) P: Advanced graduate standing or consent of instructor. Ph.D. student introduction to major historical and emerging theories, methods, technologies, and applications in Informatics. Provides students with opportunities to explore relevant research literature, results, and applications. Students will develop a profound understanding of leading research approaches and paradigms in their research area.

INFO–I 619 Structural Bioinformatics (3 cr.) Informatics approaches addressing the sequence and 3D structure of biological macromolecules (DNA, RNA, Protein), with the objective of improving understanding of the function of these molecules. Topics will include molecular visualization; structure determination, alignment, and databases; and prediction of protein structure, interactions, and function.

INFO–I 621 Computational Techniques in Comparative Genomics (3 cr.) Summarizes computational techniques for comparing genomes on the DNA and protein sequence levels. Topics include state of the art computational techniques and their applications: understanding of hereditary diseases and cancer, genetic mobile elements, genome rearrangements, genome evolution, and the identification of potential drug targets in microbial genomes.

INFO–I 667 Seminar in Health Informatics II (3 cr.) P: INFO I530. Advanced graduate seminar in health informatics, designed to complement INFO I530. This seminar is intended for graduate students enrolled in the Health Informatics track in the Informatics Doctoral Program.

INFO–I 690 Topics in Informatics (1–3 cr.) P: Graduate standing. Variable topic. Emphasis is on new developments and research in informatics. Can be repeated with different topics, subject to approval of the Dean. Course is intended for Ph.D. students in the School of Informatics.

INFO–I 698 Research in Informatics (1–12 cr.) Research not dissertation related under the direction of a member of the graduate faculty.

INFO–I 699 Independent Study in Informatics (1–3 cr.) P: Consent of instructor. Independent readings and research for Ph.D. students under the direction of a faculty member, culminating in a written report.

INFO–I 709 Advanced Seminar II in Informatics (3 cr.) P: Advanced graduate standing or consent of instructor. Ph.D. student introduction to major historical and emerging theories, methods, technologies, and applications in Informatics and its sub-areas.Provides

students with opportunities to explore relevant research literature, results, and applications. Seminar II, unlike Seminar I, focuses on recent advances in sub-areas of Informatics.

INFO–I 790 Informatics Research Rotation (3 cr.)
Working with faculty to investigate research opportunities.

INFO–I 798 Professional Practicum/Internship (0 cr.)
P: Current enrollment in graduate degree program in Informatics. Participation in graduate level professional training and internship experience.

INFO–I 890 Thesis Readings and Research (1–12 cr.)
Research under the direction of a member of the graduate faculty leading to a Ph.D. dissertation.

Inner Asian and Uralic Studies

College of Arts and Sciences

Center E-mail: iaunrc@indiana.edu

Center URL: www.indiana.edu/~iaunrc

Curriculum

Area Certificate in Inner Asian and Uralic Studies

The Inner Asian and Uralic Studies Program offers a strong interdisciplinary training program for students interested in the languages and societies of Central Eurasia, stretching from the Baltic, Hungary, and Turkey to Central Asia, Tibet, and Mongolia. IU's greatest concentration of expertise and instruction in the area is brought together by the Inner Asian and Uralic National Resource Center. Center faculty pursue both historical and contemporary analysis in a wide range of disciplines, including anthropology, business, comparative literature, economics, folklore, history, journalism, linguistics, music and drama, political science, public administration, and religious studies. Center faculty also offer three levels of instruction in all of the following living languages indigenous to the Center's area: Estonian, Finnish, Hungarian, Mongolian, Persian/Tajik, Tibetan, Turkish, and Uzbek. Other living and classical languages of Central Eurasia are offered less frequently, including Chagatai, Evenki, Kazakh, Kyrgyz, Mordvin, Turkmen, and Uygur.

Course Requirements

Eighteen (18) credit hours of graduate course work, including 9 credit hours from the Department of Central Eurasian Studies; or in the case of Turkish Studies, the Departments of Near Eastern Languages and Cultures and/or Central Eurasian Studies. All courses are to be selected in consultation with the Inner Asian and Uralic National Resource Center director.

Language Requirements

Students will be required to demonstrate intermediate competence in a relevant language. No credit toward the certificate will be awarded for first-year language courses. No more than 6 hours of language courses may be counted toward the certificate.

Grades

Minimum of a B (3.0) in all courses that count toward the certificate.

Examination

None.

Faculty

Director

Edward Lazzerini (Central Eurasian Studies)

Associate Director

Professor Toivo Raun* (Central Eurasian Studies)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Robert Campbell* (Emeritus, Economics), Denis Sinor* (Emeritus, Central Eurasian Studies)

Professors

Michael Alexeev* (Economics), Matthew Auer* (Public and Environmental Affairs), Randall Baker* (Emeritus, Public and Environmental Affairs), Ilhan Basgöz* (Emeritus, Central Eurasian Studies), Gustav Bayerle* (Emeritus, Central Eurasian Studies), Christopher I. Beckwith* (Central Eurasian Studies), Jack Bielasiak* (Political Science), Jamsheed Choksy* (Central Eurasian Studies), Devin DeWeese* (Central Eurasian Studies), Ben Eklof* (History), David Fidler (Law), William Fierman* (Central Eurasian Studies), Henry Glassie* (Emeritus, Folklore), Mary Goetze* (Emeritus, Music), Michael Hamburger* (Geological Sciences), Michael Kaganovich* (Economics), György Kara* (Central Eurasian Studies), Marjorie A. Lyles* (Business), John L. Mikesell* (Public and Environmental Affairs), Christine L. Ogan* (Emerita, Journalism), Toivo Raun* (Central Eurasian Studies), Nazif Shahrani* (Anthropology, Central Eurasian Studies), Kemal Silay* (Central Eurasian Studies), Martin Spechler* (Economics), Mihály Szegedy-Maszák* (Central Eurasian Studies), David Williams* (Law)

Associate Professors

Christopher Atwood* (Central Eurasian Studies), Maria Bucur-Deckard* (History), Owen V. Johnson* (Journalism), Bill Johnston (Linguistics), Dodona Kiziria (Emeritus, Slavic Languages and Literatures), Matthias Lehmann* (History), Paul Losensky* (Central Eurasian Studies), Vicky Meretsky* (Public and Environmental Affairs), Martha Nyikos* (Education), Elliot Sperling* (Central Eurasian Studies), Margaret Sutton* (Education), Herbert Terry* (Telecommunications)

Assistant Professors

Gardner Bovingdon* (Central Eurasian Studies), Lynn Hooker* (Central Eurasian Studies), Ron Sela* (Central Eurasian Studies)

Academic Specialists/Senior Lecturers

Cigdem Balim-Harding* (Near Eastern Languages and Cultures), Edward Lazzerini (Central Eurasian Studies), Roman Zlotin (Geography)

Adjunct Assistant Professor

Christiane Gruber (Fine Arts)

Academic Advisor

Edward Lazzerini (Central Eurasian Studies), Goodbody Hall 348, (812) 856-0671, elazzeri@indiana.edu

Courses

Anthropology
E455 Anthropology of Religion
E600 Seminar in Cultural and Social Anthropology

Business
D503 International Business Environment
D504 Operations of International Business
D545 East Europe and Russia Transition
D594 Competitive Strategic Global Industries
D595 Management of Transnational Corporations

Central Eurasian Studies
R501The Baltic States since 1918
R502 Finland in the 20th Century
R504 Modern Finnish Literature
R508 Estonian Culture and Civilization
R513 Islam in the Former Soviet Union
R516 Peoples and Cultures of Central Asia
R528 Post-Soviet Transition in Central Asia
R562 Mongolian Civilization and Folk Culture
R563 Mongolian Historical Writings
R570 Introduction to the History of Tibet
R571 Tibet and the West
R572 Sino-Tibetan Relations
R573 The Religions of Tibet
R592 Uralic Peoples & Cultures
R599 Topics in Central Eurasian Studies
R611 Ethnic History of Central Asia
R629 Islamic Hagiography of Central Asia
R661 Mongolian Literature and Folklore
R690 Advanced Readings in Central Eurasian Studies
R710 Seminar in Central Asian Studies (3 cr.)
T690 Introduction to Manchu (3 cr.)
T693 Introduction to Sakha (Yakut)

All language courses in the following languages:
Azeri
Chaghatay
Estonian
Finnish
Hungarian
Kazakh
Mongolian
Classical Mongolian
Pashto
Tibetan
Classical Tibetan
Classical Old Tibetan
Turkish
Ottoman Turkish
Uyghur
Uzbek

East Asian Languages and Cultures
E384 East Asian Nationalism and Cultural Identity
E505 Studies in East Asian Society (Topics course)

Economics
E698 Comparative Economics and Economics of Transition

Education
H551 Comparative Education I
H552 Comparative Education II
H560 Education and Change in Societies

Fine Arts
A421 Early Christian Art

Folklore
F440/540 Turkish Art
F600 Asian Folklore and Folk Music
F617 Middle East Folklore and Folk Music

Geography
G427 Geography of Former Soviet Lands

History
C393 Ottoman History
D521 Hungarian History and Civilization to 1711
G582 Imperial China I
G583 Imperial China II
H645 Eastern Europe 1945-1989: Survival and Resistance
H675 Colloquium in East Asian History

India Studies
I501/502 Elementary Sanskrit
I561/562 Intermediate Sanskrit

Journalism
J660 Topics Colloquium

Music
E571 Kodaly Concept I
E573 Kodaly Concept II

Near Eastern Languages and Cultures
N545 Introduction to Ancient Near East
N565 Introduction to Islamic Civilization
N695 Graduate Topics in Near Eastern Languages and Cultures
P500/550 Elementary Persian
P600/650 Intermediate Persian

Political Science
Y340 East European Politics
Y385 Russian Political Ideas
Y657 Comparative Politics

Religious Studies
R552 Studies in Buddhism
R554 East Asian Religions
R635 Buddhism in North America
R655 Materials and Methods in Buddhist Studies
R658 Methodologies and Methods in Buddhist Studies

R670/770 Buddhist Ethics
R750 Seminar on Indian Buddhist Texts

Russian and East European Institute
R575 Graduate Readings in Russian and East European Study
R600 Proseminar Soviet/East European Area Studies

School of Library and Information Science
L610 International Information Issues
L620 Slavic Bibliography

School of Public and Environmental Affairs
E535 International Environmental Policy
V550 Governmental Finance in Transitional Economies
V551 Trade and Global Competition
V557 International Economic Strategies and Trade Policies

Slavic Languages and Literatures
R553 East European Cinema

In addition to the above, students are encouraged to take the initiative to find other courses that the professor would be willing and able to adapt for IAUNRC certificate credit. (This might be, for example, by agreeing that the student's papers and/or other projects would focus on the IAUNRC region or that the student may do additional reading and writing relevant to the region.)

Jewish Studies

College of Arts and Sciences

Departmental E-mail: iujsp@indiana.edu

Departmental URL: www.indiana.edu/~jsp

Departmental Phone: (812) 855-0453

Departmental Fax: (812) 855-4314

Curriculum

M.A. in Jewish Studies

The M.A. in Jewish Studies is intended to provide students with the advanced interdisciplinary study and the language background necessary to prepare them for a doctoral program in a disciplinary department or to prepare students for nonacademic careers in the professional world and nonprofit sector. The program will normally take two years to complete. The program is designed to provide students with a solid working knowledge in one or more languages relevant to the study of Jewish culture (typically Modern Hebrew, Biblical Hebrew, and/or Yiddish), a broad exposure to the academic field of Jewish Studies in a number of different disciplines in the humanities and social sciences, and the analytical skills that should serve them whether they choose to pursue a doctoral degree related to Jewish Studies or find employment in the professional world, for example in philanthropy or education.

Admission Requirements

Bachelor's degree with evidence of superior ability and completion of the Graduate Record Examination. Second-year proficiency of Hebrew or another relevant language is desirable but not a requirement for admission.

Course Requirements

A total of 32 credit hours. Students are required to complete JSTU-H 520 (4 cr.); 16 credits (at least four courses) to be distributed among courses taught by Jewish Studies faculty; and 12 credits (at least three courses) of electives. Of the electives, 3 credits can be in JSTU-J 699 for research towards an M.A. thesis.

Grades

Only courses that receive a grade of B- or higher will count towards fulfillment of the course requirements. Students must retain an overall average in courses fulfilling the course requirements of B (3.0) or higher.

Language Requirement

Completion of the Jewish Studies M.A. requires second-year reading proficiency in a language relevant to the student's research interest, normally Modern Hebrew, Biblical Hebrew, or Yiddish. First and second year (elementary and intermediate level) language courses in the first foreign language do not count towards the degree requirements but may be necessary to demonstrate proficiency. Up to 6 credits in a second relevant language may be counted towards the required 16 credits of courses taught by Jewish Studies faculty.

M.A. Thesis or Comprehensive Exam

To complete the M.A. in Jewish Studies, students will have a choice of writing an M.A. thesis (not to exceed 40 pages or 12,000 words) or completing a comprehensive exam. Students who choose the thesis option will register for 3 credits under JSTU-J 699 and will be examined on the thesis by a committee of three faculty members, at least two of whom must be Jewish Studies faculty. Students who select the comprehensive exam option will be examined on a reading list to be selected in consultation with the exam committee, which will consist of three faculty members, at least two of whom must be Jewish Studies faculty.

Dual M.A. in Jewish Studies and History

The combined program will have a total of 52 credit hours, instead of the 62 hours required to attain the two degrees separately. Students will take 5 courses counting towards Jewish Studies and 5 courses counting towards History, as well as 12 credits of electives.

Admission Requirements

Bachelor's degree with evidence of superior ability and completion of the Graduate Record Examination. Second-year proficiency of Hebrew or another relevant language is desirable but not a requirement for admission. Students will have to meet admission requirements in the Department of History (refer to the University Graduate School Bulletin).

Course Requirements

20 credit hours in Jewish Studies, including JSTU-H 520 (4 cr.) and 16 credits (at least four courses) taught by Jewish Studies faculty; 20 credit hours in History, including HIST-H 601 and 16 credits of course work in the Department of History, with a minimum of one seminar and two colloquia; 12 credits (at least three courses)

of electives. Courses taken to fulfill requirements in the Department of History can include courses on Jewish history but cannot be identical with the courses counted towards fulfillment of the Jewish Studies requirements.

Grades

Only courses that receive a grade of B- or higher will count towards fulfillment of the course requirements. Students must retain an overall average in courses fulfilling the course requirements of B (3.0) or higher.

Language Requirement

Second-year reading proficiency in one language relevant to the student's research interest, normally Modern Hebrew, Yiddish, or Biblical Hebrew, is required for completion of the degree. Language courses in a language relevant for the student's research interest, normally Modern Hebrew, Yiddish, or Biblical Hebrew, can be counted to fulfill the elective credit requirement.

M.A. Thesis, Comprehensive Exam, and History Field Review

To complete the Jewish Studies component of the dual M.A., students will have a choice of writing an M.A. thesis (not to exceed 40 pages or 12,000 words) or completing a comprehensive exam. Students who choose the thesis option will register for 3 credits under JSTU-J 699 and will be examined on the thesis by a committee of three faculty members, at least two of whom must be Jewish Studies faculty. Students who select the comprehensive exam option will be examined on a reading list to be selected in consultation with the exam committee, which will consist of three faculty members, at least two of whom must be Jewish Studies faculty. In order to complete the History component of the M.A., students will undergo a field review in the Department of History, for which they will submit two papers written for a History course, at least one of which was written in a seminar.

Ph.D. Minor in Jewish Studies

The Borns Jewish Studies Program has as its objective the study of Jewish civilization from antiquity to the present and its interaction with and impact on world civilization. The program draws on the many disciplines necessary to study the multifaceted Jewish experience, thus bringing a variety of approaches to the study of Jewish civilization. The contributing units include Anthropology, Comparative Literature, English, Folklore and Ethnomusicology, Germanic Studies, History, Near Eastern Languages and Cultures, Philosophy, Religious Studies, and the Russian and East European Institute. Because of the interdisciplinary nature of the Jewish Studies Program, the structure of course work will vary according to each student's areas of interest and departmental requirements.

Course Requirements

Fifteen (15) hours of graduate credit in courses on Jewish Studies with a grade of B or higher. All students are required to take a core course, JSTU-H 520 Colloquium in Jewish Studies. No more than two courses may be taken in the student's home department. No more than 6 credit hours of individualized readings can be applied to the minor. No more than eight (8) hours of transfer credit from another institution may be applied to the minor. Relevant graduate courses from any discipline may be counted toward the minor. With permission from a student's home department, students may pursue an intensive minor in Jewish studies. The selection of courses must be approved by the Jewish Studies Associate Director or Academic Advisor.

Note: Doctoral students in History can major in modern Jewish history. Doctoral students in Religious Studies can focus on Biblical Interpretation or Judaism and Christianity in Antiquity.

Ph.D. Minor in Yiddish

Students may complete a Ph.D. minor in Yiddish through the Department of Germanic Studies. Requirements include 12 credits, consisting of GER Y502, GER Y503, GER Y504, 3 remaining credits to be chosen from GER Y505, GER Y506, GER Y815, and other courses focusing on non-language Yiddish topics.

Faculty

Director
Jeffrey Veidlinger* (Jewish Studies and History)

Associate Director

Matthias Lehmann* (Jewish Studies and History)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Dr. Alice Field Cohn Chair in Yiddish Studies

Dov-Ber Kerler* (Jewish Studies and Germanic Studies)

Irving M. Glazer Chair in Jewish Studies

Alvin H. Rosenfeld * (Jewish Studies and English)

Jay and Jeanie Schottenstein Chair in Jewish Studies

Shaul Magid* (Jewish Studies and Religious Studies)

Lou and Sybil Mervis Chair in the Study of Jewish Culture

Judah Cohen* (Jewish Studies and Folklore and Ethnomusicology)

Pat M. Glazer Chair in Jewish Studies

Mark Roseman* (Jewish Studies and History)

Rosenfeld Chair in Jewish Studies

Jeffrey Veidlinger* (Jewish Studies and History)

Rudy Professor of Political Science

Jeffrey Isaac* (Political Science)

Ruth N. Halls Professor

Dror Wahrman* (History)

Professors

James S. Ackerman* (Emeritus, Religious Studies), Paul Eisenberg* (Emeritus, Philosophy), Stephen Katz* (Jewish Studies and Near Eastern Languages and Cultures), Dov-Ber Kerler* (Jewish Studies and Germanic Studies), Shaul Magid* (Jewish Studies and Religious Studies), Michael Morgan* (Emeritus, Jewish Studies and Philosophy), Mark Roseman* (Jewish Studies and History), Alvin Rosenfeld*

(Jewish Studies and English), Jeffrey Veidlinger* (Jewish Studies and History)

Associate Professors

Judah Cohen* (Jewish Studies and Folklore and Ethnomusicology), Matthias Lehmann* (Jewish Studies and History), Herbert J. Marks* (Comparative Literature), Dina Spechler* (Political Science)

Adjunct Professors

Joëlle Bahloul* (Anthropology), Jack Bielasiak* (Political Science), Michelle Facos* (History of Art), Susan Gubar* (Emerita, English), J. Albert Harrill* (Religious Studies), Jeffrey Isaac* (Political Science), Bronislava Volková* (Emerita, Slavic Languages and Literatures), Dror Wahrman* (History)

Adjunct Associate Professors

Halina Goldberg* (Music-Musicology), Nancy Levene* (Religious Studies)

Senior Lecturer and Director of Modern Hebrew Language Program

Ayelet Weiss, Goodbody Hall 003-03, (812) 855-2338

Lecturers in Hebrew

Michal Maoz-Levy, Rachel Naor

Academic Advisor

Carolyn Lipson-Walker, Goodbody Hall 325, (812) 855-0453

Courses

Jewish Studies

JSTU–H 500 Topics in Jewish Studies (3 cr.) Topics: Jewish Thought; Zionism and Contemporary IsraelIntensive study of selected topics and issues in Jewish Studies.

JSTU–H 520 Colloquium in Jewish Studies (4 cr.) This course is an interdisciplinary survey of various methodologies and approaches to the field of Jewish studies.

JSTU–H 595 Directed Readings in Jewish Studies (1–3 cr.) Directed readings in various topics in Jewish Studies; topics, credit hours, and readings to be determined in consultation with faculty member with whom the student wishes to work.

Anthropology

ANTH–E 332 Jewish Women: Anthropological Perspectives (3 cr.)

ANTH–E 682 Memory and Culture (3 cr.)

ANTH–E 600 Seminar in Cultural and Social Anthropology (3 cr.) Topics: Ethnicities of Israel; The Jewish Family; Jewish Women; Modern Jewish Society and Culture.

Comparative Literature

CMLT–C 505 Western Literary and Intellectual Traditions to 1500 (4 cr.) Topic: Ancient Mediterranean Literature and the Rise of Interpretation

CMLT–C 545 The Bible and Western Literature (4 cr.) (when topic focuses on Hebrew Bible) Topics: The Poetics of Biblical Narrative; Prophecy and Poetry.

English

ENG–L 761 American Poetry (4 cr.) Topic: Conceptualizing Culture after Auschwitz

ENG–L 780 Special Studies in English and American Literature (4 cr.) Topic: Literature of the Holocaust

Folklore

FOLK–F 634 Jewish Folklore and Ethnology (3 cr.)

Germanic Studies

GER–Y 501 Beginning Yiddish I (3 cr.)

GER–Y 502 Beginning Yiddish II (3 cr.)

GER–Y 503 Intermediate Yiddish I (3 cr.)

GER–Y 504 Intermediate Yiddish II (3 cr.)

GER–Y 505 Topics in Yiddish Literature (3 cr.) Topics: Fantasy, Realism, and Fiction: The First Century of Modern Yiddish Literature, 1810-1913; Love, Soul, and Destiny in Modern Yiddish Literature; Readings in Modern Yiddish Poetry; Selected Readings in 20th-Century Yiddish Fiction.

GER–Y 506 Topics in Yiddish Culture (3 cr.) Topics: Aspects of Modern Yiddish Culture, 1880-1980; Culture, Memory, and Identity: Yiddish in the Post-Holocaust World; Ghetto, Shtetl, and Beyond: Millennium of the History and Sociology of Yiddish; History and Society of Yiddish; Readings in Yiddish Ethnography: Folklore and Dialectology; Yiddish in America.

GER–Y 815 Individual Readings in Yiddish Studies: Language, Literature and Culture (1–4 cr.)

History

HIST–H 523 The Holocaust (3 cr.)

HIST–H 620 Colloquium: Modern Western European History (4 cr.) Topics: Approaches to Jewish Studies; Globalization and Jewish History; Jews in Modern Europe; The Judeo-Spanish Diaspora; Life after Death: Rebuilding Germany after World War II.

HIST–H 640 Colloquium in Russian History (4 cr.) Topics: Jews in Eastern Europe; The Holocaust in the Soviet Union

HIST–H 645 Colloquium in East European History (4 cr.)

HIST–H 680 Colloquium in Cultural History (4 cr.)

HIST–H 720 Seminar: Modern Western European History (4 cr.)

HIST–H 740 Seminar in Russian History (4 cr.) Topic: Culture and Empire; Jews in Eastern Europe.

HIST–H 745 Seminar in East European History (4 cr.)

HIST–H 780 Seminar in Cultural History (4 cr.)

Institute for Biblical and Literary Studies

IBLS–I 600 Colloquium in Biblical and Literary Studies (4 cr.) (when topic focuses on Hebrew Bible)

Near Eastern Languages and Culture

NELC–H 500 Elementary Hebrew I (2 cr.)

NELC–H 550 Elementary Hebrew II (2 cr.)

NELC–H 575 Introductory Readings in Hebrew Literature (3 cr.)

NELC–H 590 Intensive Elementary Hebrew (4 cr.)

NELC–H 600 Intermediate Hebrew I (3 cr.)

NELC–H 650 Intermediate Hebrew II (3 cr.)

NELC–H 670 Advanced Hebrew I (3 cr.)

NELC–H 680 Advanced Hebrew II (3 cr.)

NELC–N 471 Biblical Hebrew I (3 cr.)

NELC–N 472 Biblical Hebrew II (3 cr.)

NELC–N 473 Biblical Hebrew III (3 cr.)

NELC–N 511 Foreign Study in Near Eastern Languages and Cultures (2–8 cr.)

NELC–N 517 Biblical Hebrew IV (3 cr.)

NELC–N 587 Modern Hebrew Literature in English (3 cr.)

NELC–N 588 Recent Hebrew Literature in English (3 cr.)

NELC–N 591 Directed Readings in Hebrew (1–6 cr.)

NELC–N 675 The Kibbutz in Fact and Fiction (3 cr.)

NELC–N 687 Modern Hebrew Literature in Hebrew (3 cr.)

NELC–N 691 Research in Medieval Hebrew Texts (3 cr.)

NELC–N 695 Graduate Topics in Near Eastern Languages and Cultures (1–4 cr.) Topics: Biblical Themes in Modern Hebrew Literature in English; Introductory Readings in Hebrew Literature; Modern Hebrew Literature in English; Recent Hebrew Literature in English; Recent Hebrew Literature in Hebrew; S. Y. Agnon and the Jewish Experience.

NELC–N 708 Seminar in Judaic Literature (4 cr.)

NELC–N 720 M.A. Thesis (arr. cr.) This course is eligible for a deferred grade.

Religious Studies

REL–R 511 Religion of Ancient Israel (3 cr.) Topics: The Book of Job and the Crisis of Faith; Studies in Religion (Issues in the Study of the Hebrew Bible); Narrative in the Hebrew Bible.

REL–R 521 Studies in Early Christianity (3 cr.) Topics: Ancient Mediterranean and Near Eastern Religions; Paul and His Influence in Early Christianity.

REL–R 541 Studies in the Jewish Tradition (3 cr.) Topics: The Struggle for the Holy Land: Power, Piety, and Politics in the Israeli-Palestinian Conflict; Prophecy in Ancient Israel; Judaism in the Making; Introduction to Jewish Mysticism; Messiahs and Messianism in Comparative Perspective; Religious Thought in Medieval Judaism; Religious Issues in Contemporary Judaism (Major Trends in Modern Judaism; Women in Judaism); Talmud, Topics in Ancient Israelite Religion (The Sabbath in Literature and Liturgy); Topics in the History of Judaism.

REL–R 660 Religion and Culture (4 cr.) Topics: American Jewish Thought and Culture; Studies in American Judaism: Theological and Cultural Perspectives.

REL–R 672 Religious Thought and Ethics (4 cr.) Topic: The Jewish Jesus: From Antiquity to the Present

REL–R 714 Studies in Jewish Thought and Culture (4 cr.)

REL–R 610 Studies in Biblical Literature and Religion (4 cr.)

REL–R 615 The Bible in Literature Courses (4 cr.)

REL–R 663 History of Biblical Interpretation (4 cr.)

REL–R 763 History of Biblical Interpretation (4 cr.)

REL–R 793 Advanced Biblical Study (1–4 cr.)

Slavic Languages and Literatures

SLAV–C 564 Modern Czech Literature and Culture (3 cr.) Topic: 20th-Century Literature, History, and Film.

SLAV–C 565 Seminar in Czech Literature and Culture (3 cr.) Topic: Central European Literature and Culture Between the Wars.

SLAV–R 545 Jewish Characters in Russian Literature (3 cr.)

Journalism

School of Journalism

Departmental E-mail: gketcham@indiana.edu

Departmental URL: www.journalism.indiana.edu

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, dual Master of Arts and Master of Library Science (jointly with the School of Library and Information Science), dual Master of Arts and Master of Public Affairs, dual Master of Arts and Master of Science in Environmental Science (jointly with the School of Public and Environmental Affairs), dual Master of Arts with Folklore and Ethnomusicology (jointly with the Department of Folklore and Ethnomusicology), dual Master of Arts and J.D. in Law (jointly with the School of Law), and Doctor of Philosophy

Special School Requirements

(See also general University Graduate School requirements.)

Master's Degrees

Master of Arts Degree

Two programs (tracks) are available: a professional track and a research and teaching track. The following requirements apply equally to both tracks.

Admission Requirements

(1) A superior record in the undergraduate major from a recognized institution, (2) an appropriate level of achievement on the Graduate Record Examination General Test, (3) three letters of recommendation, and (4) a 500-word statement of purpose.

Superior students who have not majored in journalism or mass communications are encouraged to apply to either the professional or research/teaching track. The school accepts applications for admission to our M.A. program at any time.

Grades

B (3.0) average or above required.
Master of Arts Degree, Professional Track

Course Requirements

A total of 30 credit hours, including the core offerings of J510 Media and Society Seminar, J502 Quantitative Research Methods for Journalists, J572 The Press and the Constitution. For students who enter the program without a journalism degree, J505 Intensive Reporting, Writing, and Editing Workshop, is also required. Students also must take one visual professional skills course, two other professional skills courses, and 9 additional credit hours. The additional credit hours may be all journalism electives or, upon approval of the student's advisor, may include up to 9 credit hours in a minor field. A special arrangement with the School of Library and Information Science allows a 12 credit minor in that school. The Intensive Reporting, Writing, and Editing Workshop may be waived for students who have had professional media experience.

Master of Arts Degree, Research and Teaching Track

Course Requirements

A total of 30 credit hours, including the core offerings of J500, J510, and J572. Students must complete a thesis (J800) and 18 additional credit hours. The additional credit hours may all be journalism electives or, upon approval of the student's advisor, may include up to 9 credit hours in a minor field. A special arrangement with the School of Library and Information Science allows a 12 credit minor in that school.

Thesis

Thesis (J800) required, for 3 credit hours.

Master of Arts for Teachers Degree

Major Field Course Requirements

A minimum of 20 credit hours in journalism, advertising (marketing), and telecommunications. Consult the associate dean for graduate studies for specific degree requirements.

Dual Master of Arts and Master of Library Science Degrees

Admission Requirements

Students must be admitted by both the School of Journalism and the School of Library and Information Science. Requirements for admission to the School of Journalism are the same as those for the M.A. degree.

Course Requirements

A total of 21 credit hours in journalism, including J500, J510, J651, a graduate-level reporting course, either a professional skills course or J800, and 6 additional credit hours of graduate journalism electives. Thirty (30) credit hours are required in the School of Library and Information Science, including the core (S501; S502; one from S503 or S504; one from S551, S552, S553, S671, or S583; and one from S506, S519, or S505), S533, S525, and at least one of S521 or S522. Library Science Electives courses bring the total of SLIS credit hours to 30.

Dual Master of Arts and Master of Public Affairs (M.P.A.)

The School of Journalism and the School of Public and Environmental Affairs collaborate in a combined master's degree program that addresses the demand for specialists who combine public management and public policy with public affairs reporting and writing or the study of media in society. The program prepares students for positions in the media, government, business, and nonprofit organizations. Candidates for the combined degree complete core requirements and elective courses from the School of Journalism. Candidates must be admitted to both schools.

Candidates also complete the core requirements for the M.P.A. and 15 additional credit hours selected from an approved list of courses offered by the School of Public and Environmental Affairs.

Program Requirements (57 credit hours)

Master of Arts in Journalism Requirements (21 credit hours)

Twenty-one (21) credit hours are required for the Master of Arts in Journalism. For specific requirements, see the School of Journalism Bulletin.

Master of Public Affairs Requirements (36 credit hours)

Required Courses (21 credit hours)

- SPEA V502 Public Management (3 cr.)
- SPEA V506 Statistical Analysis for Effective Decision Making (3 cr.)
- SPEA V517 Public Management Economics (3 cr.)
- SPEA V540 Law and Public Affairs (3 cr.)
- SPEA V560 Public Finance and Budgeting (3 cr.)
- SPEA V600 Capstone in Public and Environmental Affairs (3 cr.)

Specialization Courses (18 credit hours)

Each student is required to develop a specialized concentration comprised of courses approved by a SPEA faculty advisor. Concentration must be in SPEA.

Dual Master of Arts and Master of Science in Environmental Science (M.S.E.S.)

General Requirements

A total of 58 credit hours is required for the dual Master of Arts and Master of Science in Environmental Science (M.S.E.S.).

Admission Requirements

Students must be admitted by both the School of Journalism and the School of Public and Environmental Affairs. Requirements for admission to the School of Journalism are the same as those for the M.A. degree.

Journalism Course Requirements

Requirements: A total of 21 credit hours in journalism, including J510, J502 (Quantitative Research Methods

for Journalists), J572, three graduate level professional-skills classes and 3 additional credit hours of graduate journalism electives.
Note: A student without an undergraduate journalism degree may be required to take J505 Reporting/Editing Workshop.

SPEA Course Requirements

Thirty-seven (36) credit hours are required for the M.S.E.S. (Master of Science in Environmental Science).

The M.S.E.S. requirements include E526, E527, E536, E538, E552, V517 plus an additional 18 credits in a concentration area to be decided in consultation with a SPEA MSES advisor (faculty member).

Dual Master of Arts with Folklore and Ethnomusicology

Admission Requirements

Students must be admitted by both the School of Journalism and the Department of Folklore and Ethnomusicology, which is part of the College of Arts and Sciences. Requirements for admission to the School of Journalism are the same as those for the M.A. degree.

Journalism Course Requirements

A total of 24 credit hours in journalism, including J505, J510, J502 (Quantitative Research Methods for Journalists), J572, one graduate level visual professional-skills class, two professional-skills classes, and 3 additional credit hours of graduate journalism electives.

Folklore and Ethnomusicology Course Requirements

A minimum of 24 credit hours in folklore and ethnomusicology, including: F501; and any one of the following: F516, F517, E522, E529; plus either of the following: F523 or F525; plus five additional Folklore courses (15 credits), must be approved by Folklore adviser prior to enrollment; plus reading proficiency in one modern foreign language; plus a final thesis/project. Students in this dual program are required to complete the thesis/project that is required for the Folklore and Ethnomusicology M.A. They may develop their thesis/project to integrate their Folklore and Ethnomusicology interests and their Journalism interests, with a committee of two Folklore/Ethnomusicology faculty and one or more Journalism faculty.

In addition to the 24 credits required by the School of Journalism and the 24 credits required by Folklore and Ethnomusicology, students must complete at least two additional credit hours to fulfill the university's 50-credit minimum for any dual M.A.

Dual Master of Arts and J.D. in Law

Admission

Students may apply to the School of Journalism on the Bloomington campus at the same time they apply to the School of Law on the Bloomington campus. Students already enrolled in the School of Law may apply to the School of Journalism up to the completion of their second year of law study. Students enrolled in School of Journalism may apply to the School of Law up to the end of their first year of the master's program. Students would customarily spend the first year in the School of Law and thereafter divide the second, third, and fourth years between the two units.

Credit Hours

The joint program would require a minimum of 77 hours in law and 30 hours in Journalism.

Curriculum

See above curriculum for Master of Arts degree, Research and Teaching Track or the Master of Arts degree, Professional Track.

Doctor of Philosophy Degree

The School of Journalism offers the Doctor of Philosophy degree in mass communications, journalism track.

Admission Requirements

(1) Master's degree from a recognized institution, (2) superior record in the major subject, (3) appropriate level of achievement on the Graduate Record Examination General Test, (4) three letters of recommendation, and (5) a 500-word statement of purpose. Students who have not majored in mass communications at either the bachelor's or master's level are encouraged to apply. Consult the associate dean for graduate studies on whether graduate credit can be granted for course work done at the M.A. level.

The school accepts applications for admission to our Ph.D. program for fall semester only. The deadline for applications is December 1 for international students and January 15 for U.S. students.

Course Requirements

(1) Foundation core of J500, J600, J651, J570 or J571, J555 and one statistics course. (2) Either proficiency in depth in an appropriate language, usually French, German, Russian, or Spanish; or completion of an approved set of three tool-skill courses. With the permission of the director of graduate studies, these courses may be counted in the concentration areas. (3) At least two other approved courses at the 600 level in the School of Journalism. These courses may be counted in the concentration areas. (4) Twenty-one (21) to 27 credit hours in each of two concentration areas; and up to 27 credit hours in electives and dissertation for a minimum of 90 credit hours.

Much of the concentration area course work will be taken in departments outside the School of Journalism. Students, in consultation with their faculty advisors, should construct concentration areas according to their own research interests. The concentration areas may be selected from the following: (1) international communication, (2) history and philosophy of communication, (3) communication law, (4) the media and public policy, (5) economics and media management, (6) media and social systems, (7) political communication, (8) communication and culture, (9) visual communication, and (10) communication ethics. With the approval of the advisory committee, students may choose other areas of concentration more closely related to their interests. Students should consult their faculty advisors in selecting courses in concentration areas.

Grades

B (3.0) average or above required overall and in School of Journalism course work.

Periodic Review

At the beginning of the second year, members of the graduate faculty together with the student's advisor will meet with the student's first-year instructors to examine the grade and research records of each graduate student to assess the student's strengths and areas in need of attention. Any student whose achievements and potential fall far below standard will be discouraged from further work.

Advisory Committee Selection

During the first semester of the second year of course work, students will select four faculty members to serve on the advisory committee. Most students select one member for the core, one for each of the two concentration areas, and one for methodology. The chair of the advisory committee must be a member of the journalism faculty. One other member of the committee must come from journalism. A least two of the members must be on the graduate faculty, and one must be from outside the journalism and telecommunications faculty. The outside member usually represents one of the concentration areas.

Qualifying Examination

Each student is evaluated for Ph.D. candidacy in the following ways: at the completion of course work, the student will take (1) a four-hour written examination on the foundation core, (2) a problem-solving, take-home examination on methodology, (3) a four-hour written examination on the first concentration area, (4) a four-hour written examination on the second concentration area; and following the written examinations, (5) a comprehensive oral examination administered by the student's advisory committee. (The written and oral examinations must be completed within a period of no more than four weeks.)

Research Committee Selection

The research committee will consist of four faculty members, one from outside the School of Journalism and the Department of Telecommunications. The chairperson and at least one other member of the committee must be journalism faculty. The members may be, but need not be, the same as those who served on the advisory committee, and the chairperson may be the same or different. The chairperson should be a full member of the graduate faculty. All members must be members of the graduate faculty, and at least half the committee must be full members.

Final Examination

Oral, primarily a defense of the dissertation.

Ph.D. Minor in Journalism

Students outside the School of Journalism must take 12 credit hours of graduate course work in the School of Journalism to earn a minor. Upon consultation with the associate dean for graduate studies, students may organize a minor tailored to their interests, but they must submit the proposed program of study to the Graduate Committee of the School of Journalism for approval.

Faculty

Dean

Professor Bradley Hamm

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Trevor Brown* (Emeritus), Dan Drew* (Emeritus), Jack E. Dvorak*, Peter Jacobi* (Emeritus), Shannon E. Martin*, David P. Nord*, Christine L. Ogan* (Emerita), Carol C. Polsgrove* (Emerita), David H. Weaver*, G. Cleveland Wilhoit* (Emeritus), Lars Willnat

Associate Professors

David Boeyink*, Bonnie Jeanne Brownlee, Claude H. Cookman, Michael Thomas Conway*, Jon Paul Dilts*(Emeritus), Michael Evans*, Anthony L. Fargo*, Owen V. Johnson*, James Kelly, Radhika Parameswaran*, Steven Laurence Raymer, S. Holly Stocking* (Emerita)

Assistant Professors

Hans Ibold, Lesa Hatley Major*, Emily Metzgar, W. Joann Wong

Associate Dean for Graduate Studies

Professor Shannon E. Martin*, Ernie Pyle Hall 200H, (812) 855-8111

Courses

JOUR–J 500 Introduction to Mass Media Research (3 cr.) Seminar on content analysis, experiments, survey methods, qualitative research, historical and legal methodology. Development of media research proposals.

JOUR–J 501 Public Affairs Reporting (3 cr.) Lectures and roundtable discussion of problems in covering public affairs issues at the national, state, and local levels. Emphasis on reporting on government, social welfare agencies, elections, political parties, special interest groups, and other areas of general public interest.

JOUR–J 502 Quantitative Research Methods for Journalists (3 cr.) Introduction to social science principles of measurement, sampling, statistical inferences and logic of research design in collection, analysis and interpretation of information used in journalism and mass media.

JOUR–J 505 Intensive Reporting, Writing, and Editing Workshop (3–6 cr.) This course introduces graduate students to the fundamental practices and principles of writing, reporting, editing and design for the print media. Students will develop skills in news judgment, document-based information gathering, interviewing, observation and description, news and feature writing, ethics, page layout, headline writing, copy editing, content editing, and photo editing.

JOUR–J 510 Media and Society Seminar (3 cr.) Examination of structure, functions, ethics, and

performance of communication and mass media, stressing a review of pertinent research literature. Analysis of media policies and performance in light of communication theory and current economic, political, and social thought.

JOUR–J 514 International Communication (3 cr.) Comparative analysis of international media systems. Course topics and geographical regions studied vary from semester to semester.

JOUR–J 520 Seminar in Visual Communication (3 cr.) Integration of advanced visual communication skills, including photography, writing, and editing. Individual projects in packaging news and public affairs information. Emphasis on experimentation with message forms outside constraints of the traditional news media.

JOUR–J 525 Colloquium in Scholastic Journalism (1–3 cr.) Examination of problems in teaching journalism and supervising school publications. Topics may include impact on scholastic journalism of changes in educational philosophy, law, financial support, and technology.

JOUR–J 528 Public Relations Management (3 cr.) Designed to enable students to manage a public relations department. Theories and principles relevant to public relations practiced in agency, corporate, and not-for-profit organizations will be covered. This will include developing goals and objectives, working with clients, developing budgets, and research methods.

JOUR–J 529 Public Relations Campaigns (3 cr.) Designed to provide students with the opportunity to develop and execute a Public relations campaign for a local not-for-profit organization. Students will be exposed to relevant Public relations theory and in-depth case study analysis.

JOUR–J 530 Issues in New Communication Technology (3 cr.) Study of the political, economic, social, legal, and historical issues involved in the introduction and diffusion of communication technologies. Research on the uses and potential effects of new technologies on the structure and practice of journalism and mass media.

JOUR–J 531 Public Relations for Nonprofits (3 cr.) This graduate seminar focuses on how a nonprofit organization creates images and how it shapes its programs and goals to gain public support. Assignments and readings are designed to foster a theoretical and practical understanding of promotional techniques and campaigns using journalistic and other media.

JOUR–J 542 Arts, Media, and Society (3 cr.) Study of issues in arts journalism and the role of the arts in mass media and society. Lectures by guest experts and independent research on current trends and problems in the field, emphasizing the public affairs aspects of the arts.

JOUR–J 544 Science, Society, and Media (3 cr.) An examination of science in society, with a particular look at research and commentary on media coverage of science and technology. Reading, reflection, and discussion of both theoretical and practical issues, and independent reading and research on a topic of the student's own choosing.

JOUR–J 551 Seminar: Reporting the Law (3 cr.) Study of public affairs aspects of the law. Research and reporting on timely topics pertaining to the courts, the legal profession, and law enforcement agencies particularly as they relate to the social-political-economic order.

JOUR–J 552 Seminar: Reporting the Arts (3 cr.) Principles of literary, theater, art, dance, and music reporting and criticism. Emphasis on the preparation of articles for publication.

JOUR–J 553 Education and the Media (3 cr.) Study of problems and issues in such areas as school finance, curriculum development, teaching methodology, and the politics of education. Research and reporting on current trends in the field.

JOUR–J 554 Science Writing (3 cr.) Exploration of the challenges and opportunities associated with writing about science for nonscientists. Reading and discussion of articles and texts about communicating science to nonscientists, and practical exercises in reporting and writing.

JOUR–J 555 Teaching Mass Communications in College (3 cr.) Exploration of the theory and practice of college pedagogy. Specific attention to skills required for teaching mass communications. Includes development of a new course syllabus and teaching portfolio.

JOUR–J 556 Seminar: Urban Affairs Reporting (3 cr.) Study of current urban problems, such as air pollution, transportation, inner-city redevelopment, ghetto life, and metropolitan government. Research and reporting on timely topics.

JOUR–J 560 Topics Colloquium (1–4 cr.) Topical seminar dealing with changing subjects and material from semester to semester.

JOUR–J 563 Computerized Publication Design I (3 cr.) This publishing design course incorporates typesetting, electronic photo editing, graphics, and page design. Students are instructed in design theory, computer publishing skills, and creative problem solving.

JOUR–J 565 Computerized Publication Design II (3 cr.) This advanced publishing design course builds on J563 Computerized Design I and incorporates advanced work in color, type design, computer illustration, creative problem solving, and an introduction to print production.

JOUR–J 570 Theory and Research: Individual Level (3 cr.) Introduction to the theory and research relevant to mass media studies at the individual level of analysis. Corresponds to R541 in the telecommunications department.

JOUR–J 571 Theory and Research: Macro-Social Level (3 cr.) Introduction to theoretical orientations and research findings at the macro-social level of analysis.

JOUR–J 572 The Press and the Constitution (3 cr.) Seminar on specialized topics concerning the rights and obligations of mass media under the Bill of Rights. Research and discussion on law of privacy, access, and other constitutional problems.

JOUR–J 573 Ethnographic Reporting and Writing (3 cr.) This skills course explores the ethnographic, community-based approach to magazine journalism. Students will gain an understanding of how communities

invest themselves, and how to report from this perspective.

JOUR–J 574 Gender and Media (3 cr.) This course exposes students to work in the broad interdisciplinary arena of gender and media. It will address the complex ways gender conceptions structure the cultural and economic landscape of media, including newspaper, television, magazines, advertising, and photography.

JOUR–J 575 Student Press Law and Ethics (1–3 cr.) This course explores legal and ethical dilemmas surrounding high school student media. This course traces the history of the student rights movement, especially concentrating on student press rights and responsibilities.

JOUR–J 576 Management of School Publications (1–3 cr.) This course will focus on high school press advertising and management. It examines faculty, administration, and staff relations; management techniques; staff and editorial policies; legal and ethical responsibilities; and trends in the high school press.

JOUR–J 577 Yearbook Advising (1–3 cr.) This class focuses on high school yearbook advising. The course will cover yearbook financial management, business contracts, common components of marketing/sales, faculty/administration/staff management, supervising techniques, and legal and ethical responsibilities.

JOUR–J 592 Media Internship (1–3 cr.) Professional experience in media. Students hold work assignments with media organizations. Grading is on an S/F basis. Arranged through the associate dean for graduate studies office. This course is eligible for a deferred grade.

JOUR–J 600 Quantitative Methods in Mass Communication Research (3 cr.) P: J500 or R500, and one statistics course. Advanced behavioral methods in the analysis of mass communication data. Practice in analyzing data with computerized statistical programs.

JOUR–J 614 Communication and National Development (3 cr.) Study of the structure and roles of the mass media in national development and the application of communication theory and technology to the problems of development and social change.

JOUR–J 624 Russian and East European Area Media Systems (3 cr.) Investigation of theory and practice of communications systems in the region, including history, news content, institutions, journalists, technology, economic and political pressures, as well as audience and international influences.

JOUR–J 650 History and Philosophy of the Media (3 cr.) Lectures and discussion on the origins, the historical growth, and the philosophical roots of the communication media, with particular emphasis on the relationship between the media and political, economic, social, and cultural trends in the United States.

JOUR–J 651 Qualitative Methods in Mass Communication Research (3 cr.) Seminar on qualitative, historical, and legal research methods for mass communication research.

JOUR–J 653 The Media in the Twentieth Century (3 cr.) Seminar on topics in the history and philosophy of the communication media in the twentieth century, stressing both continuity and change in an age of rapid technological growth for print and electronic media in the United States and in selected areas of the world.

JOUR–J 655 Ethics and Journalism (3 cr.) Exploration of the role of ethics in journalism. Using literature that examines ethics in the context of journalism practice, the course will analyze ways journalists attempt to deny or limit the role of ethical values. Special attention to objectivity, freedom, and casuistry.

JOUR–J 660 Topics Colloquium (3 cr.) Topical seminar dealing with changing subjects and material from semester to semester.

JOUR–J 672 Topics in Communication Law (3 cr.) Independent research and roundtable analysis of selected problems in communication law.

JOUR–J 673 Government and Mass Media (3 cr.) Independent research and roundtable analysis of political communication and government-media relations.

JOUR–J 700 Specialized Reporting Project (3 cr.) This course is eligible for a deferred grade.

JOUR–J 800 M.A. Thesis or Creative Project (3 cr.) This course is eligible for a deferred grade.

JOUR–J 804 Readings and Research in Journalism (arr. cr.) This course is eligible for a deferred grade.

Graduate

GRAD–G 741 Ph.D. Research in Mass Communications (arr. cr.) This course is eligible for a deferred grade.

GRAD–G 790 Readings and Research in Mass Communications (1–3 cr.) This course is eligible for a deferred grade.

Landscape Studies

College of Arts and Sciences

Departmental E-mail: landskib@indiana.edu

Departmental URL: www.indiana.edu/~landskib

Curriculum

Ph.D. Minor in Landscape Studies

The Landscape Studies Program encourages interdisciplinary study and critical analysis of landscape. The program offers training in this important multidisciplinary field that has grown in importance in the last decade. The program is one of a very few programs in the U.S. that focus explicitly on Landscape Studies at the graduate level.

Admission and Program of Study

In collaboration with the Landscape Studies director and the student's major program advisor, students are required to submit a Program of Study to the Landscape Studies Advisory Committee for final approval. The Program of Study will provide the rationale for the student's proposed curriculum and will list the courses, with alternative selections in the event such courses are not offered on a timely basis, that will serve as the student's minor program. With the Landscape Studies Advisory Committee's approval of the Program of Study, the

student will become officially enrolled in the Landscape Studies Program.

Ph.D. Minor Requirements

Requirements for the Landscape Studies Ph.D. minor encourage graduate students to develop a program of academic inquiry that complements their doctoral program and takes advantage of the wide range of College of Arts and Sciences faculty with training in the fields of landscape geography, environmental history, landscape literature and art, and landscape architecture. Each program is developed in consultation between the student and the Landscape Studies director. Students must complete L800: Seminar in Landscape Studies, a suitable theory course, an approved elective course, and a directed readings course focused on landscape studies with a member of the Landscape Studies faculty and approved by the Landscape Studies director for a total of 12 credit hours. Of hours counted toward the minor, at least 9 must be from outside the student's major field. Additionally, the Landscape Studies Program will submit one question for the student's qualifying examination.

Faculty

Graduate Minor Director

Daniel C. Knudsen* (Geography)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professor

Michelle Facos* (History of Art), Daniel Knudsen* (Geography), Edward Linenthal* (History)

Associate Professors

Laurel Cornell* (Sociology), Owen Dwyer III (Geography, IUPUI), Stephanie Kane* (Criminal Justice), Vicky Meretsky* (Applied Ecology, Public and Environmental Affairs), Eric Sandweiss* (Carmony Chair, History), Reyes Vila-Belda* (Spanish and Portuguese)

Associate Professor Emeritus

Charles Greer* (Geography)

Courses

Courses which meet the criteria of the Ph.D. Minor in Landscape Studies come from several disciplines and professional schools. All students are expected to take L800.

GRAD–L 800 Seminar in Landscape Studies (3 cr.) An interdisciplinary graduate seminar in landscape studies that provides students with an understanding of the history of landscape studies, basic theoretical tools, and an overview of principal landscape studies themes. Students are required to engage in fieldwork as part of the class.

GRAD–L 830 Readings in Landscape Studies (3 cr.) P: Consent of the director. Supervised readings on selected topics in landscape studies.

Latin American and Caribbean Studies

Departmental E-mail: clacs@indiana.edu

Departmental URL: www.indiana.edu/~clacs

Program Information

Students working on the Ph.D. in other departments may also qualify for an area certificate or an outside minor in Latin American and Caribbean studies.

The Center for Latin American and Caribbean Studies fulfills a direct teaching function through its M.A. program and its doctoral-level certificate and minor, as well as a highly important liaison and coordinating function among departments and schools with teaching, research, and contract responsibilities related to Latin America and the Caribbean.

The teaching mission aims toward interdisciplinary training in the Latin American and Caribbean area in a three- to four semester (30 credit hours) M.A. program, specifically tailored to those preparing for business, government, foreign service, or secondary school and junior college teaching opportunities. Advanced work in at least two fields and one interdisciplinary seminar give depth and breadth to such an education. Students select their own fields of emphasis from the Departments of Anthropology, Communication and Culture, Folklore and Ethnomusicology, Geography, History, Linguistics, and Spanish and Portuguese, as well as from the Kelley School of Business, the Jacobs School of Music, and the Schools of Education, Journalism, and Public and Environmental Affairs.

Special Program Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission Requirement

Graduate Record Examination general test scores are generally required before candidates can be considered for admission.

Course Requirements

A total of 30 credit hours from graduate courses related to Latin America and the Caribbean: At least 12 credit hours in one major field, and 9 credit hours in a second minor field; 3 credit hours of L501, an interdisciplinary seminar with variable topics and area focus; the remaining 6 credit hours from Latin American and Caribbean studies courses or related courses in other departments.

Students may concentrate in discrete disciplinary fields, like anthropology or history, as well as interdisciplinary fields like development studies, race and gender studies, Brazilian studies, Andean studies, Mesoamerican studies, expressive culture, or environmental studies. No more than a total of 6 credits of graduate-level (500 or above) language study may be used toward the major or minor fields. At least 3 credits must be taken both in the arts/humanities and the social/policy sciences. Up to 6 credits of independent study or thesis preparation may be used to research and write the thesis, but normally no more

than 3 of these 6 can be used for the major or minor fields. Students pursuing the dual degree cannot use more than 3 credits of thesis preparation toward the CLACS degree.

Grades

B (3.0) average or above must be maintained.

Foreign Language Requirement

Reading proficiency in Spanish or Portuguese or, in special cases, in an Amerindian language or Haitian Creole.

Final Examination

Written examination, which must be passed in the last semester of course work. At the discretion of the director, an oral examination may be required following the written examination.

Alternatively, a thesis may be written with prior approval of thesis proposal by the director. Following approval of the completed thesis, an oral exam on the thesis is to be taken at least two weeks before the end of the semester in which degree is to be granted.

Dual Degree: Master of Arts in Latin American and Caribbean Studies and Master of Business Administration

The Center for Latin American and Caribbean Studies and the Kelley School of Business jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees in the dual degree (M.A./M.B.A.) can be completed in a total of 64.5 credit hours rather than the 84 credit hours that would otherwise be required to take the two degrees separately (since certain courses contribute to both degrees). The two degrees must be awarded simultaneously.

The LTAM (Latin American and Caribbean Studies) M.A. degree requires a total of 30 credit hours, 24 credits of which must be taken in Latin American and Caribbean Studies under the requirements established for the M.A. Of these, the interdisciplinary seminar L501 must be taken, together with 21 credit hours in other LTAM courses or those Latin American and Caribbean Studies courses that are cross-listed with other departments or schools, except the Kelley School of Business. All other requirements for completion of the Latin American Studies M.A., including language proficiency and thesis or oral examination, remain as listed in this bulletin.

Students must also take 40.5 credit hours in the Kelley School of Business under the requirements of the M.A./M.B.A. degree, including the Foundations and Functional Cores through the M.B.A. program, L506, L509, and the Strategy Component. Up to 6 credit hours taken in the Kelley School of Business may be counted as part of the 30 credit hours normally required for the M.A. degree in LTAM.

Application for admission to the dual M.A./M.B.A. degree program must be made to the Center for Latin American and Caribbean Studies and the University Graduate School for study toward the M.A. and to the Kelley School of Business for study toward the M.B.A. Students must be accepted by all three units in order to be admitted to the program.

Dual Degree: Master of Arts in Latin American and Caribbean Studies and Master of Library Science

The School of Library and Information Science (SLIS) and the Center for Latin American and Caribbean Studies jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees in the dual degree (M.A./M.L.S.) can be completed in a total of 54 credit hours rather than the 66 credit hours that would otherwise be required to complete the two degrees separately. During the dual degree, specific courses contribute to both degrees. The two degrees must be awarded simultaneously.

Students must take 21 credit hours of advanced courses relating to Latin American and Caribbean Studies. The interdisciplinary seminar L501 (3 credits) must be taken, together with 18 credit hours in other LTAM courses or those Latin American and Caribbean Studies courses that are cross-listed with other departments. All other requirements for completion of the Latin American Studies M.A., including language proficiency and thesis or oral examination, remain as listed in this bulletin. A further 6 credit hours may be taken in SLIS and will count toward both degrees: L620 Topics in Information, Literature, and Bibliography (Topic: Latin American Bibliography) and L596 Internship in Library and Information Science (under the supervision of the Latin American Bibliography).

For the M.L.S. degree, admission requirements remain as listed in the School of Library and Information Science Bulletin, and the proposed dual program requires 30 credit hours of SLIS graduate courses. These must include three courses (9 credits) from the common core (which must include L507 and L509), and four courses (12 credits) from the specific core (L520, L524, L526, and L528). Three other courses (9 credits) may be taken as library science electives and should include L570.

Application for admission to the dual M.A./M.L.S. degree program must be made to the Center for Latin American and Caribbean Studies for study toward the M.A. and to SLIS for study toward the M.L.S. Students must be accepted by both units in order to be admitted to the program.

Dual Degree: Master of Arts in Latin American and Caribbean Studies and Master of Public Affairs

The School of Public and Environmental Affairs (SPEA) and the Center for Latin American and Caribbean Studies jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees in the dual degree (M.A./M.P.A.) can be completed in a total of 60 credit hours rather than the 78 credit hours that would otherwise be required to complete the two degrees separately. The two degrees must be awarded simultaneously.

Students must take 24 credit hours of advanced courses relating to Latin American and Caribbean studies. The interdisciplinary seminar L501 (3 credits) must be taken, together with 21 credit hours in other LTAM courses or those Latin American and Caribbean studies courses that are cross-listed with other departments. All other requirements for completion of the Latin American Studies M.A., including language proficiency and thesis or oral examination, remain as listed in this bulletin.

For the M.P.A. degree, admission requirements remain as listed in the School of Public and Environmental Affairs Bulletin, and the proposed dual program requires 36 credit hours of SPEA graduate courses. These must include the M.P.A. core requirements (18 credit hours): V502 Public Management (3 cr.), V506 Statistical Analysis for Policy and Management (3 cr.), V517 Public Management Economics (3 cr.), V540 Law and Public Affairs (3 cr.), V560 Public Finance and Budgeting (3 cr.), V600 Capstone in Public and Environmental Affairs (3 cr.), and students are required to develop a Specialized Concentration comprised of 18 credit hours of coursework approved by SPEA faculty advisors.

Application for admission to the dual M.A./M.P.A. degree program must be made to the Center for Latin American and Caribbean Studies for study toward the M.A. and to the School of Public and Environmental Affairs for study toward the M.P.A. Students must be accepted by both units in order to be admitted to the program.

Graduate Area Certificate in Latin American and Caribbean Studies

Admission Requirement

Acceptance into a Ph.D. program. Area certificate awarded only upon completion of the Ph.D. degree.

Areas of Concentration

Latin America and the Caribbean.

Course Requirements

A total of 18 credit hours with Latin American and/or Caribbean emphases, including one graduate seminar in the L501 series and 9 credit hours outside the student's major discipline and a dissertation on a Latin American or Caribbean topic.

Grades

A minimum grade of B (3.0) is required in each course that is to count toward certificate requirements.

Foreign Language Requirements

Reading proficiency in Spanish or Portuguese.

Ph.D. Minor in Latin American and Caribbean Studies

The requirements for the Ph.D. minor are flexible. Each program is developed in consultations between the student, the academic advisor of the student's major department, and the director of Latin American and Caribbean studies, though certain basic requirements are common to all programs.

Course Requirements

Twelve (12) credit hours of course work required directly related to Latin American or Caribbean subject matter, including at least one graduate seminar or readings course (3 credit hours) and 9 credit hours in two disciplines outside the student's major. Courses in the student's major department and language courses below the 500 level may not be applied to the Ph.D. minor.

Examination

If a grade point average of at least 3.7 is maintained, no examination will be required. Otherwise, the director of Latin American and Caribbean Studies may stipulate that the student take a written examination.

Program Certification

Certification that all requirements for the program have been met must come from the director of Latin American and Caribbean Studies.

Faculty

Director

Professor Bradley A.U. Levinson* (Education)

Associate Director

Andrea Siqueira, Ph.D.

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Richard Bauman* (Emeritus, Folklore and Ethnomusicology)
Charles Heiser* (Emeritus, Biology)

Rudy Professors

Jeffrey L. Gould* (History)
Emilio F. Moran* (Anthropology, School of Public and Environmental Affairs)
Albert Valdman* (Emeritus, French and Italian, Linguistics)

Bernardo Mendel Professor

Daniel James* (History)

A. F. Bentley Professor

Elinor Ostrom* (Political Science)

Chancellor's Professors

Robert Arnove* (Emeritus, Education)
Patrick McNaughton* (Art History)
Anya Peterson Royce* (Anthropology, Comparative Literature)

Professors

Robert Agranoff* (Emeritus, Public and Environmental Affairs)
Herman Aguinis* (Business)
Akwasi Assensoh* (African American and African Diaspora Studies)
Randall Baker* (Emeritus, Public and Environmental Affairs)
Maryellen Bieder* (Spanish and Portuguese)
Eduardo Brondizio* (Anthropology)
Kevin Brown (Law)
Richard Burke* (Emeritus, Telecommunications)
Keith Clay* (Biology)
Claus Clüver* (Emeritus, Comparative Literature)
Geoffrey Conrad* (Anthropology)
Della Collins Cook* (Anthropology)
Luis Dávila* (Spanish and Portuguese)
Peter Guardino* (History)
Jeffrey Hart* (Political Science)
Eileen Julien* (Comparative Literature)
Catherine Larson* (Spanish and Portuguese)
Bradley Levinson* (Education)

Michael Martin* (African-American and African Diaspora Studies)
John McDowell* (Folklore)
Heitor Martins* (Emeritus, Spanish and Portuguese)
Kathleen Myers* (Spanish and Portuguese)
Craig Nelson* (Emeritus, Biology)
Christiana Ochoa (Law)
K. Anne Pyburn* (Anthropology)
Robert Quirk* (Emeritus, History)
J. C. Randolph* (Public and Environmental Affairs)
Iris Rosa (African American and African Diaspora Studies)
Darlene Sadlier* (Spanish and Portuguese)
Gustavo Sainz* (Spanish and Portuguese)
Carmen Téllez (Music)
Richard Wilk* (Anthropology)

Associate Professors

Bonnie Brownlee* (Journalism)
Mary Clayton* (Emerita, Spanish and Portuguese)
Deborah Cohn* (Spanish and Portuguese)
Arlene Diaz* (History)
Manuel Diaz-Campos* (Spanish and Portuguese)
Patrick Dove* (Spanish and Portuguese)
John Dyson* (Emeritus, Spanish and Portuguese)
Tom Evans* (Geography)
J. César Félix-Brasdefer* (Spanish and Portuguese)
Lessie Jo Frazier* (Gender Studies)
Michael Gasser* (Informatics)
Kimberly L. Geeslin* (Spanish and Portuguese)
Matthew Guterl (African American and African Diaspora Studies)
Vivian Nun Halloran (Comparative Literature)
Stephanie Kane* (Criminal Justice)
Alejandro J. Mejías-López* (Spanish and Portuguese)
Muriel Nazzari* (Emeritus, History)
John Nieto-Phillips* (Latino Studies, History)
Phillip Parnell* (Criminal Justice)
Rebecca Martínez Reid* (Education)
Armando Razo* (Political Science)
Pravina Shukla* (Folklore and Ethnomusicology)
Catherine Tucker* (Anthropology)
Reyes Vila-Belda* (Spanish and Portuguese)

Assistant Professors

Zobeida Bonilla (Applied Health Science)
Judah Cohen (Jewish Studies)
Serafin Coronel-Molina* (Education)
Peter Cowan (Education)
Babur De Los Santos (Business)
Carl Good* (Spanish and Portuguese)
Shane Greene* (Anthropology)
David Jacho-Chávez (Economics)
Stacie Marie King* (Anthropology)
Javier León (Folklore and Ethnomusicology)
Joshua Malitsky (Communication and Culture)
Jason McGraw (History)
Carmen Medina (Education)
Eden Medina* (Informatics)
Luciana Namorato (Spanish and Portuguese)
Fernando Ona (Applied Health Science)
Oana Panaite (French and Italian)
Miguel Rodríguez-Mondoñedo* (Spanish and Portuguese)
Rinku Roy Chowdhury* (Geography)
Micol Seigel (African American and African Diaspora Studies, American Studies)
Stephen Selka (African American and African Diaspora Studies, American Studies)
Marvin Sterling (Anthropology)
Daniel Suslak (Anthropology)
Estela Vieira (Spanish and Portuguese)
Erik Willis* (Spanish and Portuguese)

Visiting Lecturer

Quetzil Castañeda

Librarian

Luis González

Cataloguer

Denise Stuempfle

Clinical Associate Professor

Roberto García (Business)

Academic Advisor

Professor Bradley Levinson*, 1125 E. Atwater Avenue, (812) 855-9098

Courses

LTAM–C 501 Elementary Haitian Creole I (3 cr.) Introduction to Haitian Creole, the vernacular language of Haiti spoken by over 9 million people; conversational drills; grammatical explanations and exercises; listening comprehension training; aspects of Haitian culture.

LTAM–C 502 Elementary Haitian Creole II (3 cr.) P: Grade of C or better in C101/501 or equivalent proficiency. Elementary Haitian Creole II focuses on reading non-specialized texts and learning about the rich, African-based folk culture and religion of the world's first black republic.

LTAM–L 500 Contemporary Mexico (3 cr.) Places contemporary Mexico in historical perspective, focusing on the nineteenth and twentieth centuries. Topics include the causes and consequences of the 1910 revolution, the position of the Indian, the political system, problems of dependent economic growth, cultural values and social change, and relations with the U.S. from a Mexican viewpoint.

LTAM–L 501 Seminar: Contemporary Latin America (3–4 cr.) At least two regions will be studied: one topic for each region, or one topic for the two regions. Regions to be cycled: Mexico, Caribbean and Central America, Andean countries, Southern Cone, Brazil.

LTAM–L 502 Contemporary Brazil (3 cr.) A survey of the culture of Brazil today: people, politics, religion, education, agriculture, industrial development, literature, music, and art. Lectures by members of various departments and visiting scholars. All reading in English.

LTAM–L 503 Contemporary Central America (3 cr.) Analyzes the contemporary conflicts in Central America by placing them in historical perspective. Includes such topic as the relation between socioeconomic structures and politics, the impact of World War II and agro-export development, agrarian reform, revolution, democratization, and relations with the United States.

LTAM–L 520 New Latin American Cinema (3 cr.) Survey of Latin American film from the 1950s to the present. Taught in English, the course is interdisciplinary

and cross-cultural, emphasizing the socioeconomic and political issues that gave rise to a specific movement.

LTAM–L 524 Contemporary Peru and Chile (3 cr.) Preconquest and colonial history of Peru. Multidisciplinary examination of twentieth-century culture. Colonial and nineteenth-century history of Chile. Contemporary culture with emphasis on development since World War II.

LTAM–L 525 Seminar in Latino and Latin American Research Issues (3 cr.) P: Graduate status or permission of instructor. A dialogue between Latin American and Latino studies specialists that will identify topics, areas, and techniques improved by explicit consideration of the other. Migration is one example of a topic that can be fully understood only by examining circumstances from both perspectives.

LTAM–L 526 Special Topics in Latin American and Caribbean Studies (1–4 cr.) Intensive study and analysis of selected Latin American and Caribbean studies problems of limited scope within an interdisciplinary format. Topics will vary and will ordinarily cut across fields, regions, or periods.

LTAM–L 527 Latin American and Caribbean Languages (1–4 cr.) Languages of Latin America and the Caribbean, other than Spanish and Portuguese.

LTAM–L 727 Latin American and Caribbean Languages (3 cr.) P: Consent of instructor. Advanced study in one of the less commonly taught languages of Latin America or the Caribbean.

LTAM–L 803 Individual Readings in Latin American Studies (1–6 cr.) Draws upon materials from anthropology, business, economics, education, folklore and ethnomusicology, geography, history, political science, sociology, and Spanish and Portuguese literature.

LTAM–M 501 Yucatec Maya I (3 cr.) Introduction to Yucatec Maya language and culture. Yucatec Maya is an indigenous language of Mexico spoken by close to one million people; basic grammatical structures and vocabulary; conversational drills; and lessons on historical and cultural context.

LTAM–M 502 Yucatec Maya II (3 cr.) P: Grade of C or higher in M501 or equivalent proficiency. The second semester of Yucatec Maya emphasizes vocabulary-building, simple conversation, beginning writing, and common grammatical patterns.

LTAM–Q 501 Quechua I (3 cr.) Introduction to Quechua, spoken by over 13 million people across the Andean nations of South America; basic grammar and vocabulary; an introduction to the culture and history of the Andean region.

LTAM–Q 502 Quechua II (3 cr.) P: Grade of C or higher in Q501 or equivalent proficiency. Part II of first-year Quechua, this course builds on the basic vocabulary and grammar lessons of Quechua I and introduces further aspects of Andean culture and history.

LTAM–Q 601 Quechua III: Intermediate Quechua (3 cr.) P: Grade of C or higher in Q502 or equivalent proficiency. Intermediate Quechua focuses on more advanced grammatical constructions; vocabulary building; conversational drills; reading/writing Quechua texts.

LTAM–Q 602 Quechua IV: Advanced Quechua (3 cr.) P: Grade of C or higher in Q601 or equivalent proficiency. Advanced Quechua offers serious students the opportunity to refine their conversational skills, practice more extensive reading/writing of Quechua texts, and deepen their knowledge of the Andean region. For courses in other departments acceptable for degree and certificate requirements, consult the director of Latin American and Caribbean Studies.

Latino Studies

College of Arts and Sciences

Departmental E-Mail: latino@indiana.edu
Departmental URL: http://www.indiana.edu/~latino/

Curriculum

Ph.D. Minor in Latino Studies

The Latino Studies Program allows graduate students in the Social Sciences, Humanities, Sciences, Business, Law, and Education to develop expertise on the historical and contemporary experiences of Latinos in social, cultural, political, and economic contexts. The program emphasizes interdisciplinary, comparative, and applied approaches to knowledge. It addresses the experiences of Mexican Americans, Puerto Ricans, Cubans, Dominicans, Central Americans and other Latin Americans who have immigrated to the United States or who have resided in the U.S. for multiple generations. Our courses examine Latino communities and experiences within local, national, transnational, and diasporic contexts.

Admission and Program of Study

Students interested in pursuing a Ph.D. Minor in Latino Studies should consult with the Director of Latino Studies, who will recommend a member of the faculty to serve as an advisor. In consultation with the advisor, the student will complete the “Program of Study Form” and file it with the Director of Latino Studies for final approval. Upon completion of the course work, the Director of Latino Studies or the student’s Latino Studies advisor will attest to the successful completion of the outside minor.

Course Requirements

Students in other departments can minor in Latino Studies by completing twelve (12) credit hours of course work directly related to Latino Studies subject matter with a grade point average no lower than B (3.0). At least one graduate seminar (L599 or L601) or readings course (L701) is required, and the remaining credits can come from these or any other Latino Studies course offered by faculty outside of the student’s home department. Courses below the 500 level may not be applied to the Ph.D. minor.

Faculty

Graduate Minor Director

John Nieto-Phillips* (History)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Richard Bauman* (Emeritus, Anthropology, Folklore), Luis Dávila* (Spanish & Portuguese), Luis Fuentes-Rohwer (Law), Jeffrey L. Gould* (History), Peter Guardino* (History), John McDowell* (Folklore and Ethnomusicology), Christiana Ochoa (Law), Iris Rosa (African American and African Diaspora Studies), Alberto Torchinsky* (Mathematics)

Associate Professors

Raquel T. Anderson* (Speech and Hearing Sciences), J. César Félix-Brasdefer* (Spanish and Portuguese), Deborah N. Cohn* (Spanish & Portuguese), Arlene J. Díaz* (History), Manuel Díaz-Campos* (Spanish & Portuguese), Vivian Nun Halloran* (Comparative Literature), Bradley Levinson* (Educational Leadership and Policy Studies), Gerardo López* (Educational Leadership and Policy Studies), Rebecca Martínez* (Counseling and Educational Psychology), Alejandro Mejías-López* (Spanish & Portuguese), John Nieto-Phillips* (History), Fabio Rojas (Sociology), Vasti Torres* (Educational Leadership and Policy Studies)

Assistant Professors

Zobeida E. Bonilla (Applied Health Science), Serafin Coronel-Molina* (Education), Lessie Jo Frazier* (Gender Studies), Luis A. González (Wells Library), Javier León (Folklore and Ethnomusicology), Sylvia Martínez (Educational Leadership and Policy Studies), Eden Medina* (School of Informatics), Daniel Suslak (Anthropology), Mariana Tres (Fine Arts)

Courses

LATS–L 501 Seminar in Latino Studies (3–4 cr.) P: Graduate students only. Introduce students to interdisciplinary, comparative and applied approaches to the historical and contemporary experiences of Latino in their social, cultural, political and economic contexts.

LATS–L 599 Individualized Readings in Latino Studies (1–4 cr.) P: Class is open only to students pursuing a Ph.D. minor in Latino Studies. Class requires Latino Studies faculty approval. Students must complete an agreement including goals of the course, number of readings, titles of readings (if possible) and the date of work it is to be completed.

LATS–L 601 Colloquium in Latino Studies (3–4 cr.) P: Open to students pursuing a Ph.D. minor in Latino Studies. Representative readings in interdisciplinary, comparative and applied approaches to the historical and contemporary experiences of Latinos in their social, cultural and economic contexts.

LATS–L 701 Seminar in Latino Studies (3–4 cr.) These courses involve research at a mature level in specialized topics and problems in Latino Studies.

Law

Maurer School of Law

Departmental E-mail: lawadmis@indiana.edu

Departmental URL: www.law.indiana.edu

Curriculum

Degrees Offered

Doctor of Philosophy in Law and Social Science, combined M.A. in Journalism and J.D. in Law, combined M.A. or M.S. in Telecommunications and J.D. in Law, and a Ph.D. minor in law. In addition, although they are not graduate degrees offered through the University Graduate School but instead professional degrees offered through the Maurer School of Law, the School offers the Master of Laws (L.L.M.), the Master of Comparative Law (M.C.L.), the Doctor of Juridical Science (S.J.D.), and the Doctor of Jurisprudence degrees. Joint degree programs include the combined M.B.A. and J.D. in Law, the combined M.P.A. or M.S.E.S. and J.D. in Law, and the combined M.L.S. and J.D. in Law. For information regarding these degrees, see the website or bulletin of the Maurer School of Law.

Special School Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree in Law and Social Science

This program is designed to allow qualified students to pursue interdisciplinary research and problem solving in areas where law and social science overlap. The specialized Law and Democracy track within this degree program provides an interdisciplinary course of study focused on the way that law structures democracy. This track allows students to learn about the role of law in new and fragile democracies through coursework and experience in the field, training in the law and the social sciences, and comparative analyses of the experience of the United States and other countries. Inquiries about the general degree or the specialized track may be addressed to the Office of International Programs of the School of Law.

Joint Degree Programs

The Law School offers several formal joint-degree programs that allow students to combine a law program with programs from other Indiana University schools and departments. These joint-degree programs allow students to earn a J.D. and either a master's degree or a Ph.D. in another discipline. Joint degrees decrease the time, typically by a year, that students would spend earning both degrees separately. Joint-degree programs with other disciplines may be individually designed and structured to meet students' learning and career goals. Proposals for such individually designed programs should initially be submitted to the School of Law. The School of Law will coordinate with the other school or department to establish the joint or concurrent program.

Candidates for joint-degree programs are encouraged to apply for admission to each school at the same time. However, law students can apply for admission to the other school or department before the end of the second year of law study. Students enrolled in master's programs at other schools and departments should apply for admission to the Law School before the end of the first year of the master's program. Each degree has required course work. Joint degrees are awarded at the same time, and all requirements in both schools must be completed in order to receive each degree.

Whether in a formal or individually structured joint-degree program, students typically spend their first year at the Law School. Thereafter, course time is divided between the Law School and the other school or department in whatever way best meets the educational objectives of the student and the program requirements.

As a general rule, joint-degree programs do not require academic work during the summer recess, permitting joint-degree candidates to take advantage of opportunities for internships, clerkships, and summer associate programs.

Joint Degree: Master of Arts in Journalism and Doctor of Jurisprudence in the School of Law

Admission Requirements

Students may apply to the School of Journalism on the Bloomington campus at the same time they apply to the School of Law on the Bloomington Campus. Students already enrolled in School of Law may apply to the School of Journalism up to the completion of their second year of law study. Students enrolled in the School of Journalism may apply to the School of Law up to the end of their first year of the master's program. Students would customarily spend the first year in the School of Law and thereafter divide the second, third and fourth years between the two units.

Credit Hours

The joint program would require a minimum of 79 hours in law and 30 hours in journalism, including a thesis.

Curriculum

Master of Arts Degree, Research and Teaching Track

A total of 30 credit hours in journalism, including J500, Introduction to Mass Media Research; J510, Media and Society Seminar; J800, M.A. Thesis and 21 additional credit hours in journalism.

Master of Arts Degree, Professional Track

A total of 30 credit hours in journalism, including the core offerings of J560, Intensive Reporting, Writing, and Editing Workshop I; J560, Intensive Reporting, Writing, and Editing Workshop II; J510, Media and Society Seminar; J572, The Press and the Constitution; one visual professional skills course, two other professional skills courses, and nine additional hours of electives.

School of Law Requirements

Students must complete 79 credit hours in law, including all degree requirements for the J.D.

Joint Degree: Master of Arts/Master of Science in Telecommunications and Doctor of Jurisprudence in the School of Law

The Law School and the Department of Telecommunications offer joint Doctor of Jurisprudence—Master of Arts/Master of Science degrees. Under the program, students may complete both the J.D. and the M.A. or M.S. in telecommunications in eight semesters.

Interested students usually apply to the Law School and the Department of Telecommunications at the same time; however, a person already enrolled in the Law School may apply for admission to the Department of Telecommunications up to the completion of the second year of law study. A student enrolled in telecommunications may seek admission to the School of Law up to the end of the first year of the master's program.

Students customarily spend the first year in the School of Law and thereafter divide the second, third, and fourth years between the two units. Requirements for graduation are 79 credit hours in law (including all degree requirements) and 27 credit hours in telecommunications courses (including all of its required coursework) as well as a cumulative grade point average of at least 2.3 on all work taken in the School of Law and at least 3.0 on all work taken in the Telecommunications department.

Ph.D. Minor in Law

The School of Law offers a minor in law for Ph.D. students from other fields, which requires completion of 13-16 credit hours of course work. There are two required courses: a basic methodological course, such as contracts, torts, property, constitutional law, criminal law, or civil procedure; and either a research seminar (2 credits) or independent research (2 credits). Other courses to be taken will depend on the student's interests and needs and shall be recommended by the assigned faculty advisor from the School of Law and approved by the student's Ph.D. advisory committee and the appropriate chairperson or the dean of the student's school. Examinations are required for individual courses, but none is required for the minor itself.

The minor chairperson in the School of Law is Associate Dean Leonard Fromm, Room 024, (812) 855-5361.

Faculty

Dean
Professor Lauren K. Robel*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Val Nolan Professor

Lauren Kay Robel*

James Louis Calamaras Professor

David Paul Fidler

Willard and Margaret Carr Professor of Labor and Employment Law

Kenneth Glenn Dau-Schmidt*

C. Ben Dutton Professors

Fred H. Cate*, J. William Hicks* (Emeritus), Donna M. Nagy

Walter W. Foskett Professors

John S. Applegate*, William Popkin* (Emeritus), Susan H. Williams*

Ralph F. Fuchs Professor of Law and Public Service

Patrick L. Baude* (Emeritus)

John S. Hastings Professor

David C. Williams*

Harry T. Ice Professor

Yvonne Cripps

John F. Kimberling Professor

Charles Gardner Geyh

William W. Oliver Professor of Tax Law

Leandra Lederman

Robert A. Lucas Professors

Craig M. Bradley*, Roger B. Dworkin* (Emeritus), Jeffrey E. Stake*

Robert H. McKinney Professors

Douglass Boshkoff* (Emeritus), Daniel O. Conkle*

Richard S. Melvin Professor

Gene R. Shreve*

Roscoe C. O'Byrne Professor

Alfred C. Aman Jr.*

Harry Pratter Professor

Joseph L. Hoffman*

Professors

A. James Barnes* (Public and Environmental Affairs), Jeannine Bell, Terry A. Bethel*, Kevin D. Brown, Hannah Luise Buxbaum, Stephen A. Conrad*, Robert L. Fischman, Luis E. Fuentes-Rohwer, Ann J. Gellis, Donald H. Gjerdingen*, Edwin Greenebaum* (Emeritus), Michael Grossberg* (History), Robert H. Heidt, William Henderson, Mark Janis, Dawn Elizabeth Johnsen, Jayanth Krishnan, Julia C. Lamber*, Fedwa Malti-Douglas* (Gender Studies), Ajay Mehrotra, Christiana Ochoa, William W. Oliver* (Emeritus), Aviva Anne Orenstein, John Allen Scanlan* (Emeritus), F. Thomas Schornhorst* (Emeritus), J. Alexander Tanford*

Associate Professors

Brian Broughman, Kevin E. Collins, Jody Madeira, Colleen K. Pauwels, Ryan Scott, Timothy Waters, Deborah Widiss

Courses

For a list of courses and their descriptions, see the course list of the Maurer School of Law.

Library and Information Science

School of Library and Information Science

Departmental E-mail: slis@indiana.edu

Departmental URL: www.slis.indiana.edu

Curriculum

Degrees Offered

Doctor of Philosophy, and, jointly with other academic programs, Master of Library Science and Doctor of Jurisprudence; Master of Information Science and master's degrees in folklore and ethnomusicology, public affairs, and Russian and East European studies; Master of Library Science and master's degree in African American and African Diaspora Studies, African Studies, art history, comparative literature, English, folklore and ethnomusicology, history, history and philosophy of science, journalism, Latin American and Caribbean studies, music theory or musicology, public affairs, and Russian and East European studies. The School of Library and Information Science offers the Specialist in Library and Information Science, the Master of Library Science, the Master of Information Science, a dual MIS/MLS, the Master of Library Science with specializations in African studies librarianship, archives and records management, library technology management, music librarianship, rare books and manuscripts librarianship, and the Master of Library Science or Master of Information Science with specializations in chemical information and in digital libraries degrees. For further information, see the School of Library and Information Science Bulletin.

Graduate Certificate in Information Architecture

Admission Requirements:

Applicants must meet requirements for admission to the master's degree programs in the School of Library and Information Science: www.slis.indiana.edu.

Course Requirements

Students must complete 18 graduate credit hours; credits counted toward another degree may not be applied toward the Certificate. Required courses: S515 Information Architecture (3 cr.); S556 Systems Analysis and Design (3 cr.); S512 Information System Design (3 cr.); S633 Indexing (3 cr.); S516 Human Computer Interaction (3 cr.); S690 Capstone in Information Architecture (3 cr.)

Special School Requirements

(See also general University Graduate School requirements.)

Dual Master's Degree Programs with the University Graduate School

- African American and African Diaspora Studies (M.A.) and M.L.S.
- African Studies (M.A.) and M.L.S.
- Art History (M.A.) and M.L.S.
- Central Eurasian Studies (M.A.) and M.I.S.
- Central EurasianStudies (M.A.) and M.L.S.
- Comparative Literature (M.A.) and M.L.S.
- English (M.A.) and M.L.S.
- Folklore and Ethnomusicology (M.A.) and M.I.S.
- Folklore and Ethnomusicology (M.A.) and M.L.S.
- History (M.A.) and M.L.S.
- History and Philosophy of Science (M.A.) and M.L.S.
- Journalism (M.A.) and M.L.S.
- Latin American and Caribbean Studies (M.A.) and M.L.S.
- Musicology or Music Theory (M.A.) and M.L.S.
- Russian and East European Studies (M.A.) and M.I.S.
- Russian and East European Studies (M.A.) and M.L.S.
- African American and African Diaspora Studies (M.A.) and Master of Library Science (M.L.S.)

The dual M.A./M.L.S. program requires completion of a minimum of 58 credit hours of graduate course work. (The degrees, if completed separately, would require 68 credit hours.) Students must apply for admission to the master's

programs of both the School of Library and Information Science and the Department of African American and African Diaspora Studies and meet the admissions criteria established for each. The two degrees must be awarded at the same time.

In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S. Foundation courses (15 cr.).
2. Either S521 Humanities Information or S522 Social Sciences Information (3 cr.).
3. SLIS elective courses (12 cr.).

A minimum of 28 credit hours is required in the Department of African American and African Diaspora Studies for the Master of Arts degree. See the University Graduate School Bulletin for specific requirements.

African Studies (M.A.) and Master of Library Science (M.L.S.)

The dual M.A./M.L.S. program requires completion of a minimum of 56 credit hours of graduate course work, rather than the 66 credit hours required if the two degrees are earned separately. Students must apply for admission to the masters programs of both the School of Library and Information Science and the African Studies Program and meet the admissions criteria established for each. The two degrees must be awarded at the same time.

In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S. Foundation courses (15 cr.), with S551 Library Management to fulfill the management and leadership skills requirement.
2. Either S521 Humanities Information or S522 Social Sciences Information (3 cr.).
3. SLIS elective courses (12 cr.).

A minimum of 26 credit hours is required for the Master of Arts degree. Contact the African Studies Program for details.

Art History (M.A.) and Master of Library Science (M.L.S.)

This program is designed to prepare students for professional library and information specialist positions in fine arts and related libraries and information centers. The program requires a minimum of 60 credit hours of graduate course work including a comprehensive set of required courses and overlapping electives. Students must apply for admission to the master's programs of both the School of Library and Information Science and the School of Fine Arts/History of Art and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S. Foundation courses (15 credit hours).
2. Other required SLIS courses (9 cr.): S521 Humanities Information, S651 Art Librarianship and S605 Internship in Library and Information Science.
3. SLIS elective courses (6 cr.) chosen from among S533 Online Searching, S532 Information Architecture for the Web, S652 Digital Libraries, or S633 Indexing.

At least 30 credit hours in the School of Fine Arts are required. Course work must include A500, A575, and no fewer than two seminars in two areas. Also required are four lecture courses at the 400 and 500 levels, at least two of which must be in Western art. See specific requirements under Art History in the University Graduate School Bulletin.

Central Eurasian Studies (M.A.) and Master of Information Science (M.I.S.)

The dual M.A./M.I.S. program requires completion of a minimum of 60 credit hours of graduate course work, rather than the 66 credit hours required if the two degrees are earned separately. Students must apply for admission to the masters programs of both the School of Library and Information Science and the Department of Central Eurasian Studies and meet the admissions criteria established for each. The two degrees must be awarded at the same time.

The requirements for the Master of Information Science (36 hours) are as follows:

1. M.I.S. Foundation courses (21 cr.)
2. SLIS elective courses (15 cr.) appropriate to the student's background and interests.

A minimum of 24 credit hours is required for the Master of Arts degree. Contact the Department of Central Eurasian Studies for details.

Central Eurasian Studies (M.A.) and Master of Library Science (M.L.S.)

The dual M.A./M.L.S. program requires completion of a minimum of 54 credit hours of graduate course work, rather than the 66 credit hours required if the two degrees are earned separately. Students must apply for admission to the masters programs of both the School of Library and Information Science and the Department of Central Eurasian Studies and meet the admissions criteria established for each. The two degrees must be awarded at the same time.

In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S. Foundation courses (15 cr.)
2. SLIS elective courses (15 cr.) appropriate to the student's background and interests.

A minimum of 24 credit hours is required for the Master of Arts degree. Contact the Department of Central Eurasian Studies for details.

Comparative Literature (M.A.) and Master of Library Science (M.L.S.)

This program prepares candidates for positions in academic, research, and other libraries with a humanities orientation. The total program consists of at least 50 graduate credit hours. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of Comparative

Literature and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S. Foundation courses (15 credit hours).
2. At least 15 credit hours of SLIS elective courses appropriate to the student's background and interests.

At least 20 graduate credit hours are required in comparative literature course work. The Department of Comparative Literature requires certification in at least two foreign languages, which does not count toward the 20 credit hour total required for the degree. Emphasis in the course work may be in Western literatures, East-West relations studies, Third World literatures, film studies, or studies of the interrelations of the arts (literature, music, the visual arts). For specific requirements see the entry for the Department of Comparative Literature in the University Graduate School Bulletin.

English (M.A.) and Master of Library Science (M.L.S.)

Study for these two degrees can be combined for a total of 54 credit hours rather than the 66 credit hours required for the two degrees taken separately. Admission to each of the two master's programs is approved separately on the same basis as for applicants not in the dual program. The two degrees must be awarded simultaneously. In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S Foundation courses (15 credit hours).
2. SLIS S521 Humanities Information (3 cr.).
3. SLIS elective courses (12 cr.).

A minimum of 24 credit hours is required in the Department of English. All students must fulfill the core requirements as outlined in the English Department's Master of Arts with Concentration in Literature or Special Field Master of Arts degree requirements. No thesis or examination is required for the M.A. in English. The M.A. in English does require reading proficiency in one of the following languages: French, German, Greek, Italian, Latin, Russian, Spanish. Consult the University Graduate School Bulletin for additional details on the M.A. in English.

Folklore and Ethnomusicology (M.A.) and Master of Information Science (M.I.S.)

Study for these two degrees can be combined for a total of 57 credit hours rather than the 72 credit hours required for the two degrees taken separately. Students take at least 36 graduate credit hours in information science, and at least 21 credit hours in folklore and ethnomusicology. To graduate under the dual-degree option, the two degrees must be awarded simultaneously.
Master of Information Science (36 credit hours): 21 credit hours of MIS Foundation courses, 15 credit hours of SLIS elective courses.

Master of Arts in Folklore and Ethnomusicology (21 credit hours): consult the Department of Folklore and Ethnomusicology.
Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of Folklore and Ethnomusicology. Admissions criteria established for each program must be met. For specific M.A. requirements, see the University Graduate School Bulletin.

Folklore and Ethnomusicology (M.A.) and Master of Library Science (M.L.S.)

Study for these two degrees can be combined for a total of 51 credit hours rather than the 66 credit hours required for the two degrees taken separately. Students take at least 30 graduate credit hours in library and information science, and at least 21 credit hours in folklore and ethnomusicology. To graduate under the dual-degree option, the two degrees must be awarded simultaneously.

Master of Library Science (30 credit hours): 15 credit hours of required MLS Foundation courses, plus 15 credit hours of SLIS elective courses. The S401 pre-requisite is also required.

Master of Arts in Folklore and Ethnomusicology (21 credits): Consult the Department of Folklore and Ethnomusicology.
Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of Folklore and Ethnomusicology. Admissions criteria established for each program must be met. For specific M.A. requirements, see the University Graduate School Bulletin.

History (M.A.) and Master of Library Science (M.L.S.)

Interest in public history, genealogy, historic preservation, and archives and museum administration creates a demand for professionals with expertise in both historical research and information management. The dual M.L.S./ M.A. in history program requires completion of a minimum of 50 credit hours of graduate course work. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of History and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

In addition to the SLIS S401 pre-requisite, the requirements for the Master of Library Science (30 hours) are as follows:

1. M.L.S. Foundation courses (15 credit hours).
2. Other required SLIS courses (9 cr.): S581 or S584, S605, and S521 or S522.
3. SLIS elective courses (6 cr.).

A minimum of 20 credit hours is required in the Department of History for the Master of Arts degree. For specific requirements, see the entry for the Department of History in the University Graduate School Bulletin.

History and Philosophy of Science (M.A.) and Master of Library Science (M.L.S.)

This program meets the growing demand for information professionals with a scientific academic specialty and prepares students for a variety of positions in library, research, and archival settings. The program consists of a minimum of 51 credit hours for both degrees. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of History and Philosophy of Science and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

In addition to the SLIS S401 pre-requisite, students must complete (30 credits):

1. The M.L.S. Foundation courses (15 credit hours).
2. Other required SLIS courses (9 cr.): S581 Archives and Records Management or S584 Manuscripts, S523 Science and Technology Information, and S605 Internship in Library and Information Science.
3. SLIS elective courses (6 cr.).

A minimum of 21 credit hours is required in the Department of History and Philosophy of Science for the Master of Arts degree. For specific requirements, see the University Graduate School Bulletin.

Journalism (M.A.) and Master of Library Science (M.L.S.)

The dual M.L.S./M.A. in journalism program provides excellent preparation for professional library and information specialist positions in news media and in corporate, academic, and public libraries. The program consists of a minimum of 51 credit hours for both degrees. Students must apply for admission to the master's programs of both the School of Library and Information Science and the School of Journalism and meet the admission criteria established for each. The two degrees must be awarded simultaneously. In addition to the SLIS S401 pre-requisite, students must complete (30 credits):

1. The M.L.S. Foundation courses (15 credit hours).
2. Other required SLIS courses (9 cr.): S533 Online Searching, S525 Government Information, and either S521 Humanities Information or S522 Social Science Information.
3. SLIS elective courses (6 cr.).

A minimum of 21 credit hours is required in journalism. For specific requirements contact the School of Journalism, and consult the University Graduate School Bulletin.

Latin American and Caribbean Studies (M.A.) and Master of Library Science (M.L.S.)

The School of Library and Information Science and the Center for Latin American and Caribbean Studies jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees in the dual program (M.A./M.L.S.) can be completed in a total of 51 credit hours rather than the 66 credit hours that would otherwise be required for the two degrees taken separately. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Latin American and Caribbean Studies Department and meet the admissions criteria established for each. The two degrees must be awarded simultaneously.

In addition to the SLIS S401 pre-requisite, students must complete (30 credits):

1. The M.L.S. Foundation courses (15 credit hours).
2. Other required SLIS courses (9 cr.): S533 Online Searching, S605 Internship in Library and Information Science (internship under the supervision of the Latin American bibliographer), and S629 Topics in Information Sources and Services (Topic: Latin American Bibliography).
3. SLIS elective courses (6 cr.).

Students take 21 credit hours of advanced courses relating to Latin American and Caribbean Studies (LTAM). The interdisciplinary seminar LTAM S501 (3 credits) must be taken, together with 18 credit hours in other LTAM courses or those Latin American and Caribbean Studies courses that are cross-listed with other departments. All other requirements for completion of the Latin American Studies M.A., including language proficiency and thesis or oral examination, remain as listed in the University Graduate School Bulletin.

Musicology or Music Theory (M.A.) and Master of Library Science (M.L.S.)

The dual-degree program combines an M.L.S. with an M.A. in musicology or an M.A. or M.M. in music theory. It combines the advantages of top-ranked graduate programs in library and information science and in music, and the librarians and professional staff of one of the country's largest music libraries. Through enrollment in these curricula, students may earn two master's degrees by a combination of work in the School of Library and Information Science (SLIS) and the School of Music amounting to approximately 60 credit hours (6 credits are shared between the two degrees). Applicants are expected to hold at least a bachelor's degree in music from an accredited four-year collegiate institution. For this program, students must apply for admission to both schools and the Music Librarianship Specialization and meet the admission criteria established for all three. (The admissions committee for the specialization consists of the IU music librarians.) Degrees from both schools must be awarded simultaneously.

In addition to the SLIS S401 pre-requisite, students must complete (30 credits):

1. The M.L.S. Foundation courses (15 credit hours).
2. MUS M539 Introduction to Music Bibliography (3 cr.).
3. SLIS S605 Internship in Library and Information Science (6 cr.) (P: M539, S504). Two 3 credit internships in one or two areas related to music librarianship (e.g., music cataloging, music collection development, music reference, music technology), approved by the coordinator of the Music Librarianship Specialization.
4. SLIS S655 Music Librarianship (3 cr.) (P: M539, P or C: S504 or consent of instructor).
5. SLIS elective courses (3 cr.).

For detailed information regarding degrees offered exclusively or jointly by the Jacobs School of Music and the School of Library and Information Science also see their respective bulletins.

Russian and East European Studies (M.A.) and Master of Information Science (M.I.S.)

Study for the two degrees can be combined for a total of 60 credit hours rather than the 72 credit hours required for the two degrees taken separately.

Requirements for the Master of Information Science degree are as follows:

1. Completion of SLIS M.I.S. Foundation course requirements (21 credit hours).
2. SLIS electives (15 cr.), not including SLIS S603 and REEI R620 (SLIS S629), which are considered part of the Russian and East European Studies degree,

chosen in consultation with the advisor, to bring the total of credit hours to 36.

Students take 24 credit hours in Russian and East European Studies, including R600, R601, R620, four area studies courses (one each from the social science group, the historical/geographical group, the sociocultural group, and the literature group), SLIS S605 Internship in Library and Information Science (in an area pertinent to REEI), and complete all other requirements for the Russian and East European Studies M.A., including the language proficiency exam, M.A. essay, and oral defense. Application for admission to the dual M.A./M.I.S. degree program must be made to the School of Library and Information Science for study toward the Master of Information Science and to the Russian and East European Institute for study toward the Master of Arts degree. Applicants must be accepted by both degree programs. The student must select an M.A. essay committee of three faculty members representing both REEI and the School of Library and Information Science. Both degrees will be awarded simultaneously. Consult the University Graduate School Bulletin for REEI details.

Russian and East European Studies (M.A.) and Master of Library Science (M.L.S.)

Study for the two degrees can be combined for a total of 54 credit hours rather than the 66 credit hours required for the two degrees taken separately.

In addition to the SLIS S401 pre-requisite, students must complete (30 credits):

1. The M.L.S. Foundation courses (15 credit hours).
2. SLIS electives (15 cr.), not including SLIS S605 and REEI R620 (SLIS S629), which are considered part of the Russian and East European Studies degree, chosen in consultation with the advisor, to bring the total of credit hours to 30. Students take 24 credit hours in Russian and East European Studies, including R600, R601, R620, four area studies courses (one each from the social science group, the historical/geographical group, the sociocultural group, and the literature group), SLIS S605 – “Internship in Library and Information Science” (in an area pertinent to REEI), and complete all other requirements for the Russian and East European Studies M.A., including the language proficiency exam, M.A. essay, and oral defense.

Application for admission to the dual M.A./M.L.S. degree program must be made to the School of Library and Information Science for study toward the Master of Library Science and to the Russian and East European Institute for study toward the Master of Arts degree. Applicants must be accepted by both degree programs. The student must select an M.A. essay committee of three faculty members representing both REEI and the School of Library and Information Science. Both degrees will be awarded simultaneously. Consult the University Graduate School Bulletin for REEI details.

Doctor of Philosophy in Information Science

Admission Requirements

A bachelor’s degree with a minimum grade point average of 3.2 on a 4.0 scale for undergraduate work and a cumulative grade point average of 3.5 or better on a 4.0 scale for any previous graduate level work. The Graduate Record Examination (GRE) is required and must have been taken within three years of application. A minimum overall GRE score of 1000 (i.e., Verbal = 500, Quantitative = 500 and Analytical Writing = 4.5) is required; however, admission is competitive and higher GRE scores are expected. The Test of English as a Foreign Language (TOEFL) is required for all applicants for whom English is not a native language; a minimum score of 600 on the TOEFL Paper-based Test (PBT) or 100 on the TOEFL Internet-based Test (IBT) is expected. Additional requirements include a personal statement of 800-1000 words; three letters of recommendation from academic or professional sources; a current curriculum vitae or résumé; a chronology of activities from high school graduation to the time of application; and a writing sample. The writing sample may be a single-authored publication, a technical white paper, a grant proposal, or a paper submitted to fulfill a course requirement.

Course Requirements

A total of 90 credit hours are required for the Ph.D. in Information Science. At least 60 of the 90 credit hours must be taken at the Bloomington (IUB) or Indianapolis (IUPUI) campuses of Indiana University. SLIS courses required for the doctoral degree are: S701 Introduction to Doctoral Research in Information Science (3 cr.); S702 Doctoral Research Practicum I (2 cr.); S703 Doctoral Research Practicum II (2 cr.); S710 Doctoral Research Practicum III (3 cr.); and three sections of S764 Seminar in Information Science (total of 9 cr.). Up to 15 credit hours of S799 Ph.D. Thesis may be counted toward the required 90 credit hours.

Major

A minimum of 21 credit hours of graduate coursework, approved by the student's advisory committee, must be completed in the major area. The requirement for three sections of S764 may be counted toward the total 21 credit hours for the major.

Minor

The outside minor generally consists of 9-15 credit hours. The number of credit hours, specific courses, and other requirements for the outside minor are determined by the minor department.

Research Skills

The research skills requirement consists of a minimum of 9 credit hours of basic and advanced research courses: one graduate level statistics course (3 credits) and two advanced courses (3 credits each) in graduate-level statistics, research methods, or research design.

Qualifying Examination

The qualifying examination in SLIS consists of an extended written review and analysis of a problem area that addresses critical theoretical and methodological issues relevant to the problem area. The examination includes an oral presentation and defense of the qualifying paper.

Final Examination

Final examination for the Doctor of Philosophy in Information Science consists of a public oral defense of the doctoral dissertation.

Ph.D. Minor in Information Science

The outside minor in Information Science consists of four courses (12 credit hours) of graduate coursework in the School of Library and Information Science. Coursework for the minor is identified in consultation with the SLIS faculty member who serves as the outside member on the student's advisory committee. A qualifying examination is generally not required for the minor in Information Science.

Faculty

Dean

Rudy Professor Blaise Cronin*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

David Kaser* (Emeritus), Herbert White* (Emeritus)

Professors

Katy Börner*, Blaise Cronin*, Stephen Harter* (Emeritus), Susan C. Herring*, Thomas Nisonger* (Emeritus), Debora Shaw*

Associate Professors

Josefa Abrera* (Emerita), Ronald E. Day*, Hamid Ekbia*, Shirley Fitzgibbons* (Emerita), Noriko Hara*, Elin K. Jacob*, Alice Robbin*, Howard S. Rosenbaum*, Pnina Shachaf*

Assistant Professors

Marian L. Armstrong (Emerita), Ying Ding*, Staša Milojevi#, Cassidy Sugimoto, John Walsh

Adjunct Faculty and Visiting Scholars

*see www.slis.indiana.edu for complete list, including:

Michael McRobbie*

Senior Fellow

Charles H. Davis

Graduate Advisors

Director of Doctoral Program Elin K. Jacob*, LI 011, (812) 855-4671
Associate Dean Howard Rosenbaum, LI 011, (812)855-3250

Courses

SLIS–S 501 Reference (3 cr.)

SLIS–S 502 Collection Development and Management (3 cr.)

SLIS–S 503 Representation and Organization (3 cr.)

SLIS–S 504 Cataloging (3 cr.)

SLIS–S 505 Evaluation of Resources and Services (3 cr.)

SLIS–S 506 Evaluation of Resources and Services (3 cr.)

SLIS–S 510 Introduction to Information Science (3 cr.)

SLIS–S 511 Database Design (3 cr.)

SLIS–S 512 Information Systems Design (3 cr.)

SLIS–S 513 Organizational Informatics (3 cr.)

SLIS–S 514 Computerization in Society (3 cr.)

SLIS–S 515 Information Architecture (3 cr.)

SLIS–S 516 Human-Computer Interaction (3 cr.)

SLIS–S 517 Web Programming (3 cr.)

SLIS–S 518 Communication in Electronic Environments (3 cr.)

SLIS–S 519 Evaluation of Information Systems (3 cr.)

SLIS–S 520 Information Seeking and Use (3 cr.)

SLIS–S 521 Humanities Information (3 cr.)

SLIS–S 522 Social Sciences Information (3 cr.)

SLIS–S 523 Science and Technology Information (3 cr.)

SLIS–S 524 Adult Readers Advisory (3 cr.)

SLIS–S 525 Government Information (3 cr.)

SLIS–S 526 Business Information (3 cr.)

SLIS–S 531 Business Information (3 cr.)

SLIS–S 532 Information Architecture for the Web (3 cr.)

SLIS–S 533 Business Information (3 cr.)

SLIS–S 534 Information Retrieval: Theory and Practice (3 cr.)

SLIS–S 541 Information Policy (3 cr.)

SLIS–S 542 International Information Issues (3 cr.)

SLIS–S 543 Computer-Mediated Communication (3 cr.)

SLIS–S 544 Gender and Computerization (3 cr.)

SLIS–S 550 Perspectives on Librarianship (3 cr.)

SLIS–S 551 Library Management (3 cr.)

SLIS–S 552 Academic Library Management (3 cr.)

SLIS–S 553 Public Library Management (3 cr.)

SLIS–S 554 Library Systems (3 cr.)

SLIS–S 555 Strategic Intelligence (3 cr.)

SLIS–S 556 Systems Analysis and Design (3 cr.)

SLIS–S 561 User Interface Design for Information Systems (3 cr.)

SLIS–S 571 Materials for Youth (3 cr.)

SLIS–S 572 Youth Services (3 cr.)

SLIS–S 573 Education of Information Users (3 cr.)

SLIS–S 574 Information Inquiry for School Teachers (3 cr.)

SLIS–S 580 History of Libraries (3 cr.)

SLIS–S 581 Archives and Records Management (3 cr.)

SLIS–S 582 Preservation (3 cr.)

SLIS–S 583 Rare Book Librarianship (3 cr.)

SLIS–S 584 Manuscripts (3 cr.)

SLIS–S 585 Records Management (3 cr.)

SLIS–S 601 Directed Readings (1–6 cr.)

SLIS–S 602 Directed Research (1–6 cr.)

SLIS–S 603 Workshop in Library and Information Science (arr. cr.)

SLIS–S 604 Topics in Library and Information Science (1–4 cr.)

SLIS–S 605 Internship (2–6 cr.)

SLIS–S 621 Internship (3 cr.)

SLIS–S 622 Resources and Services for People with Disabilities (3 cr.)

SLIS–S 623 Genealogy and Local History (3 cr.)

SLIS–S 629 Topics in Information Sources and Services (3 cr.)

SLIS–S 631 Advanced Cataloging (3 cr.)

SLIS–S 632 Technical Services (3 cr.)

SLIS–S 633 Indexing (3 cr.)

SLIS–S 634 Metadata (3 cr.)

SLIS–S 635 Ontologies (3 cr.)

SLIS–S 636 Semantic Web (3 cr.)

SLIS–S 637 Information Visualization (3 cr.)

SLIS–S 640 Seminar in Intellectual Freedom (3 cr.)

SLIS–S 641 Computer-Mediated Discourse Analysis (3 cr.)

SLIS–S 642 Content Analysis for the Web (3 cr.)

SLIS–S 643 The Information Industry (1–3 cr.)

SLIS–S 650 Library Philanthropy (3 cr.)

SLIS–S 651 Art Librarianship (3 cr.)

SLIS–S 652 Digital Libraries (3 cr.)

SLIS–S 653 Health Sciences Librarianship (3 cr.)

SLIS–S 654 Law Librarianship (3 cr.)

SLIS–S 655 Music Librarianship (3 cr.)

SLIS–S 656 Information Technology Standardization (3 cr.)

SLIS–S 661 Concepts and Contemporary Issues in Human-Computer Interaction (3 cr.)

SLIS–S 662 Interface Design for Collaborative Information Spaces (3 cr.)

SLIS–S 671 School Media (3 cr.)

SLIS–S 672 Seminar on Literature for Youth (3 cr.)

SLIS–S 680 The Book to 1450 (3 cr.)

SLIS–S 681 The Book 1450 to the Present (3 cr.)

SLIS–S 683 Reference Sources for Rare Books (3 cr.)

SLIS–S 684 Descriptive Bibliography (3 cr.)

SLIS–S 685 Electronic Records Management (3 cr.)

SLIS–S 690 Capstone in Information Architecture (3 cr.)

SLIS–S 701 Introduction to Doctoral Research in Information Science (3 cr.)

SLIS–S 702 Doctoral Research Practicum I (2 cr.)

SLIS–S 703 Doctoral Research Practicum II (2 cr.)

SLIS–S 706 Introduction to Research (3 cr.)

SLIS–S 710 Doctoral Research Practicum III (3 cr.)

SLIS–S 763 Research Problems and Methods in Information Science (3 cr.)

SLIS–S 764 Seminar in Information (3 cr.)

SLIS–S 765 Doctoral Research in Information Science (1–6 cr.)

SLIS–S 790 Dissertation Proposal in Information Science (3 cr.)

SLIS–S 799 Ph.D. Thesis (arr. cr.)

Elective Courses

CSCI–A 538 Network Technologies and Administration (3 cr.)

FINA–A 575 Research Sources in Art History (2 cr.)

GRAD–G 732 Bibliography of Sub-Saharan Africa (3 cr.)

MUS–M 539 Introduction to Music Bibliography (3 cr.)

Linguistics

College of Arts and Sciences

Departmental E-mail: lingdept@indiana.edu

Departmental URL: www.indiana.edu/~lingdept

Curriculum

Degrees Offered

Master of Arts in Linguistics, Doctor of Philosophy in Linguistics

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts in Linguistics

Admission Requirements

Admission to the M.A. program will be based on evaluations of (1) undergraduate grade record, (2) level

of achievement in the Graduate Record Examination General Test, (3) three letters of recommendation, and (4) undergraduate exposure to linguistics and related course work. Students not satisfying requirement (4) may be admitted but may be required to do course work prerequisite to introductory graduate courses.

Thesis

Optional; maximum of 4 credit hours.

Final Examination

None.

Course Requirements

A total of 30 credit hours, including L520, L530, L541, L542, and L543. A grade point average of 3.0 (B) must be achieved in these five core courses. Additional electives as approved by the department. Specific course requirements may be met by taking a higher level course in the same area. A minimum of 20 credit hours must be from linguistics department offerings.

Foreign Language Requirements

Reading knowledge of one foreign language approved by the department and knowledge of the structure of a language or languages other than English and outside the student's general language family. (The L653-L654 sequence may satisfy the second part of this requirement.)

Master of Arts in Linguistics with a Concentration in Computational Linguistics

Computational linguistics is an interdisciplinary field which addresses the use of computers to process or produce human language. Linguistics contributes to this field an understanding of the special properties of language data, and also provides theories and descriptions of language structure and use. Computational linguistics is largely an applied discipline concerned with practical problems. Typical applications include: natural language processing, machine translation (translating from one language to another), speech synthesis, speech production, information retrieval (finding relevant documents or parts of documents in large collections of texts), cognitive modeling, and, in general, almost anything dealing with natural language interfaces.

Course Requirements

The master's track in computational linguistics consists of a minimum of 30 credit hours to include L541, L542, L543, L545, and L645. A grade point average of 3.0 (B) must be achieved in these five core courses. Students must also fulfill a specialization course requirement by taking two of the following courses: B651 (Computer Science), Q520 (Cognitive Science), S522 (Speech and Hearing Sciences) and seminar courses such as P657 (Psychology and L700 (Linguistics) approved by the student's academic advisor. Three additional electives must be taken. A minimum of 20 credit hours must be from linguistics department offerings. Outside electives must be approved by the student's academic advisor.

Programming Language Requirement

One computer programming course or the equivalent approved by the student's academic advisor.

Foreign Language Requirement

Reading knowledge of one foreign language approved by the department.

Doctor of Philosophy Degree

Admission Requirements

Admission to the Ph.D. program will be based upon evaluation of (1) previous academic record, (2) level of achievement on the Graduate Record Examination General Test, (3) three letters of recommendation, (4) previous exposure to linguistics and related course work, and (5) compatibility of interests with those of the faculty.

Fields of Study

The doctorate is normally pursued in areas such as phonetics, phonology, morphology, syntax, semantics, historical linguistics, African linguistics, computational linguistics, and sociolinguistics. Other concentrations, including a combined degree with cognitive science, are also possible with the approval of the department.

Course Requirements

A minimum of 90 credit hours, including dissertation. Specific requirements include one graduate course each in phonetics, phonology, syntax, historical linguistics, sociolinguistics, and language acquisition, plus at least four courses in linguistics at the 600-700 levels, one of which must be L642 or L643 for students in general linguistics. Only one of these four courses may be taken outside the Department of Linguistics. L653, the first half of the field methods sequence, may not be counted if it is used in partial fulfillment of the language structure requirement. Additional course requirements may be set by the student's advisory committee.

Minor

The choice of a minor field should be agreed to by the student's advisory committee. The specific requirements for the minor are established by the department that grants the minor. The student is responsible for ascertaining what those requirements are and for meeting them.

Advisory Committee

All students in the Ph.D. program will select an advisory committee consisting of at least three faculty members, one of whom should normally represent the student's minor field. The committee must be selected no later than the end of the semester following the completion of the master's degree at Indiana University, or, in the case of students entering the program with master's degrees from other institutions, no later than two semesters after matriculation.

Students will plan their programs with the advisory committee, which will be responsible for counseling students with regard to the qualifying examination, setting the examination, and administering it.

Foreign Language Structure

Knowledge of the structure of a language other than English and outside the student's general language family (choice to be determined in consultation with the student's advisory committee).

Research Tools Requirements

(1) Reading or speaking knowledge of a foreign language relevant and applicable to doctoral study in the student's research area, and (2) proficiency in a research skill appropriate to the student's research area, including, but not limited to, reading knowledge in an additional foreign language, statistics, logic, programming, methods in social science research, and field methods. Proficiency is normally demonstrated by two semesters of appropriate instruction. Students may not count field methods classes for both the foreign language structure and research tools requirement. The choice of appropriate research tools is to be determined in consultation with the student's advisory committee.

Qualifying Examination

Comprehensive; the examination is on two distinct areas of linguistics and typically requires the student to write two papers (of publishable quality). Specific focus and scheduling of the examination is determined by the student's advisory committee.

Research Proposal

After nomination to candidacy, the student will select a research committee composed of no fewer than three members of the Department of Linguistics faculty and an outside representative. This committee must approve the proposed dissertation topic.

Final Examination

Oral defense of dissertation. This defense is open.

Ph.D. in Linguistics with a Concentration in African Languages and Linguistics

Course Requirements

A minimum of 90 credit hours, including dissertation. Specific requirements include A501, L653-L654, one graduate-level course each in phonetics, phonology, syntax, and historical linguistics, plus at least two additional courses in linguistics at the 600-700 levels. Where appropriate, additional courses may be assigned by the student's advisory committee.

Foreign Language Requirements

Three languages: (1) proficiency in two foreign languages, one of which must be an African language and the other normally French or German; and (2) knowledge of the structure of a foreign language or language group other than Romance or
Germanic.

(All other requirements are the same as the above for the Ph.D. in Linguistics.)

Ph.D. in Linguistics with a Concentration in Computational Linguistics

Course Requirements

A minimum of 90 credit hours, including dissertation. Specific requirements include L545, L645, L615, L555, one graduate-level course each in phonetics, phonology, syntax, and at least two additional courses in linguistics at the 600-700 levels. Where appropriate, additional courses may be assigned by the student's advisory committee.

Research Tool Requirements

The student must demonstrate proficiency (1), in the basics of discrete mathematics or mathematical linguistics, which can be met by courses such as L611 or Q520; and (2) in programming techniques, with working knowledge of at least two programming languages.

Qualifying Examination

The qualifying exam is comprehensive; the examination is on two distinct areas of computational linguistics and/or linguistics. At least one of the qualifying examinations must entail a practical software artifact. The artifact may be a program, a computational grammar, an implemented scheme for corpus annotation, or some other approved artifact. The other examination may take the form of a written paper (of publishable quality) or a written exam. Specific focus and scheduling of the examination is determined by the student's advisory committee.

(All other requirements are the same as the above for the Ph.D. in Linguistics.)

Ph.D. Minor in Linguistics

Doctoral students in other departments may choose linguistics as an outside minor. Twelve (12) credit hours of approved courses are required; at least three of the courses must be from the Department of linguistics. A grade point average of 3.0 (B) or higher must be achieved in these courses. The specific program for satisfying this requirement should be developed in consultation with the linguistics outside minor advisor.

Ph.D. Minor in African Languages and Linguistics

The minor consists of a minimum of four courses (12 credits) including the following: (1) one course in an African language at the 200 level or higher, (2) A501, and (3) two additional courses in African languages or linguistics approved by the student's minor advisor. A grade point average of 3.0 (B) or better must be achieved in these courses.

Ph.D. Minor in Computational Linguistics

Requirements: The minor consists of a minimum of 15 credit hours of course work, including the following: (1) L545 and L645, (2) one of L503, L541, L542, and L543, and (3) two specialization courses taken from the following: B651 (Computer Science), Q520 (Cognitive Science), S522 (Speech and Hearing Sciences) and seminar courses such as P657 (Psychology), L700 or L715 (Linguistics) or other courses (such as L614) approved by the minor advisor. A grade point average of 3.0 (B) or higher must be achieved in these courses.

Faculty

Chairperson

Professor Stuart Davis*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professor

Daniel A. Dinnsen*

Distinguished Professor Emeritus

Paul Newman*

Professors

Robert Botne*, J. Clancy Clements* (Spanish and Portuguese), Stuart Davis*, Kenneth J. de Jong*, Steven Laurence Franks* (Slavic Languages and Literatures), Samuel G. Obeng*, Robert F. Port* (Emeritus, Cognitive Science), Albert Valdman* (Emeritus, French and Italian)

Associate Professors

Julie Auger* (French and Italian) , Yoshihisa Kitagawa*, Frances Trix (Anthropology), Barbara Vance* (French and Italian)

Clinical Associate Professor

Alwiya Omar (African Studies)

Assistant Professors

Markus Dickinson*, Sandra Kuebler*

Lecturer

Richard Janda

Adjunct Professors

Phil Connell* (Speech and Hearing Sciences), Judith Gierut* (Speech and Hearing Sciences), Susan Herring* (Library and Information Science), Lawrence Moss* (Mathematics), David Pisoni* (Psychology), Rex Sprouse* (Germanic Studies, Second Language Studies), Natsuko Tsujimura* (East Asian Languages and Cultures)

Adjunct Associate Professors

Laurent Dekydtspotter* (French and Italian, Second Language Studies), George Fowler* (Slavic Languages and Literatures), Michael Gasser* (Cognitive Sciences, Computer Science), Tracy Alan Hall* (Germanic Studies), Phil LeSourd* (Anthropology, Second Language Studies), John Paolillo* (Informatics, Library and Information Science)

Adjunct Assistant Professor

Damir Cavar, Isabelle Darcy (Second Language Studies), Chien-Jer Charles Lin (East Asian Languages and Cultures), Miguel Rodríquez-Mondoñedo (Spanish and Portuguese)

Academic Advising

For Master of Arts in Linguistics and Doctor of Philosophy in Linguistics: Professor Robert Botne*, Memorial Hall 322, (812) 855-6456, dgsling@indiana.edu.

Courses

General

LING–L 503 Survey of Linguistics I (3 cr.) An introduction to the field of linguistics. Credit not given towards the M.A. in general linguistics or the Ph.D. in linguistics.

LING–L 515 The Computer and Natural Language (3 cr.) Present-day computer systems work with human language in many different forms, whether as stored data in the form of text, typed queries to a database or search engine, or speech commands in a voice-driven computer system. We also increasingly expect computers to produce human language, such as user-friendly error messages and synthesized speech. This course surveys a range of linguistics issues and problems in computational linguistics.

LING–L 520 Sociolinguistics (3 cr.) Examination of theoretical perspectives on language as a social phenomenon. Questions of linguistic variation, including social and contextual factors contributing to variation.

LING–L 530 Introduction to Historical Linguistics (3 cr.) P: L542 or equivalent. Principles of language classification and subclassification. Processes of diachronic change. Methods of linguistic reconstruction, especially the comparative method and internal reconstruction.

LING–L 541 Introductory Phonetics (3 cr.) Survey of speech sound types in languages of the world with practice in discrimination, transcription, and production. Introduction to acoustic phonetics, physiology of speech production, and speech perception; with concurrent laboratory section.

LING–L 542 Phonological Analysis (3 cr.) An introduction to the principles of contemporary phonological theory and tools of phonological analysis and description. The format of the course is oriented toward data-based problems from a wide variety of languages.

LING–L 543 Syntactic Analysis (3 cr.) An examination of the methods and argumentation used in syntactic analysis conducted within the framework of generative grammar. Emphasis on constructing and evaluating grammatical analyses and promoting critical understanding of the generative framework.

LING–L 544 Morphological Analysis (3 cr.) Introduction to the basic concepts and approaches to morphological analysis and description, to different theories of word structure, and to issues in the relation between morphology and phonology and between morphology and syntax. Data-based problem solving from a wide variety of languages.

LING–L 545 Computation and Linguistic Analysis (3 cr.) This course explores how linguistic analyses can be stated as computer programs, emphasizing the design of data structures used in linguistic analyses, the computational issues underlying them, and their use in natural language processing.

LING–L 546 Semantics (3 cr.) P: L543 or equivalent. Introduction to current semantic theory, its tools, concepts, and principles. Emphasis on constructing detailed fragments of natural language with syntactic and semantic components.

LING–L 555 Programming for Computational Linguistics (3 cr.) This course will introduce the fundamentals of programming and computer science, aiming at attaining practical skills for text processing. Through lectures, lab sessions, and weekly or bi-weekly assignments, students will learn the essentials of a given programming language (e.g., Perl) and how to apply these skills to natural language data.

LING–L 590 Linguistic Structure (3 cr.) Analysis of particular aspects of the structure of a language or of a

group of closely related languages. Methods used may include text analysis, informant work, study of secondary sources, lectures, reports.

LING–L 611 Models of Linguistic Structure (3 cr.) Formulations of linguistic structures—finite-set, phrase-structure, transformational dependency, predictive—with emphasis on their mathematical properties. Mathematical concepts underlying these formulations, such as sets, relations, Markov processes, and automata.

LING–L 614 Alternative Syntactic Theories (3 cr.) P: L543 or equivalent. An examination of a current syntactic framework other than the standard framework in terms of specific issues of syntactic analysis and general claims about the nature and organization of the syntax of natural languages. Emphasis on developing analyses within that framework.

LING–L 615 Corpus Linguistics (3 cr.) P: L543. Advances in computer technology have revolutionized the ways linguists can approach their data. By using computers, we can access large bodies of text (corpora) and search for phenomena. The course will give an introduction to the methodology and applications in the field.

LING–L 620 Advanced Sociolinguistics (3 cr.) Sociolinguistic methodology and data analysis, language ideology, and language in social institutions. Course topics include: quantitative and qualitative methods (variationist, ethnographic, and discourse analytic methods); Anglo-American, Continental pragmatics; language and sociocultural identity (culture, politeness, power, solidarity, and gender); and institutional discourse (juridical, therapeutic, political, religious, etc.).

LING–L 625 Bilingualism and Language Contact (3 cr.) Problems of multilingualism, including diglossia. Examination of selected cases illustrating the relationship between language contact and linguistic change.

LING–L 630 Lexicology (3 cr.) Analysis of the lexical structure of languages. The word and its morphological and semantic properties. Application of lexicology to practical problems in dictionary making (lexicography).

LING–L 636 Pidgins and Creoles (3 cr.) Survey of the field of pidgin and creole linguistics: presentation of the structure of selected prototypical pidgins and creoles; review of the theories for the genesis of creoles and their relationship to current issues in language acquisition and historical linguistics; discussion of language planning issues specific to pidgins and creoles, as well as discussion of current issues.

LING–L 641 Advanced Phonetics (3 cr.) P: L541 or equivalent. Experimental analysis of the speech signal; speech articulation and the structure of phonetic space. A survey of current theories of speech production and perception with experience designing and conducting experiments, and some consideration of phonetic factors that determine the choice of particular sound contrasts in languages.

LING–L 642 Advanced Phonological Description (3 cr.) P: L542 or equivalent. Problems of phonological description and their theoretical implications. Practice in formulating and evaluating explanatory statements about various phonetic, phonotactic, and morphophonemic properties of languages.

LING–L 643 Advanced Syntax (3 cr.) P: L543 or equivalent. Syntactic analysis and recent developments of principles and parameters/minimalist theory. Taking up from L543, reviews core modules of grammar from L543 and examines topics such as logical form, empty categories, barriers, functional categories, and relativized minimality. Introduces concepts of minimalist theory. Training in abstract and squib writing, paper presentation.

LING–L 645 Advanced Natural Language Processing (3 cr.) This course explores the needs of working natural language processing systems with attention to statistical and corpus linguistic methods in natural language processing, and their uses in data mining, information retrieval, lexicography, and other practical domains.

LING–L 653 Field Methods in Linguistics I (3 cr.) Techniques of data collection and analysis based on work with a native speaker of a language unknown to the students.

LING–L 654 Field Methods in Linguistics II (3 cr.) Techniques of data collection and analysis based on work with a native speaker of a language unknown to the students.

LING–L 670 Language Typology (3 cr.) Introduction to linguistic typology, the study of how languages differ and how they are alike in terms of formal features. Focuses on a variety of syntactic and morphological features of languages including: lexical classes, word order, case and agreement systems, animacy, definiteness, and gender; valence-changing devices; verbal categories and subordination.

LING–L 690 Advanced Readings in Linguistics (1–4 cr.) S/F grading.

LING–L 695 M.A. Thesis Research (1–4 cr.) This course is eligible for a deferred grade.

LING–L 700 Seminar on Current Issues (1–4 cr.) This seminar will deal with major books and articles that have defined important areas of debate in the current development of linguistic theory. The specific title will be announced well in advance of each semester.

LING–L 710 Seminar in Phonetics (3 cr.) Selected problems in the acoustic, motor, and auditory structure of the sounds of human language.

LING–L 712 Seminar in Phonology (3 cr.) Research and reports on selected problems of generative phonology.

LING–L 714 Seminar in Syntax (3 cr.) Advanced treatment of a topic, construction, or theoretical concept in syntax using a current theoretical model.

LING–L 715 Seminar in Computational Linguistics (3 cr.) The seminar will introduce students to current research in the field of Computational Linguistics.

LING–L 720 Seminar in Sociolinguistics (3 cr.) Selected problems concerning the relationship between language and society.

LING–L 760 Seminar in Historical Linguistics (3 cr.) Selected problems concerning linguistic reconstruction,

processes of diachronic change, and language classification.

LING–L 780 Seminar in Semantics (3 cr.) Selected problems in the area of meaning and the relationship between language and semantic interpretation.

LING–L 800 Research (arr. cr.) This course is eligible for a deferred grade.

The Linguistic Study of African Languages

LING–A 501 Introduction to African Linguistics (3 cr.) Introduction to the linguistic study of African languages; questions of language distribution, typological and genetic classification, comparative reconstruction, and structural aspects of individual languages.

LING–A 502 Language in Africa (3 cr.) Language in the lives and behavior of African people. Dynamics of language spread and multilingualism. Literacy, language, and education. Linguistic ritual: greetings, condolences, apologies, leave-takings. Joking and insulting relationships. Stories and storytellers. Proverbs and their use. Power of language in society.

LING–A 503 Bantu Linguistics (3 cr.) Structural comparisons of Bantu languages at levels of phonology, morphology, and syntax, noting differences and similarities of various East African languages.

LING–A 504 Chadic Linguistics (3 cr.) P: Reading knowledge of French or German. An introduction to the Chadic language family. The relationship of Chadic to Afro-Asiatic and the membership and internal classification of the Chadic family. Common structural features of present-day Chadic languages and the reconstruction of Proto-Chadic.

LING–A 747 Seminar in African Linguistics (4 cr.) Research on specific problems of African linguistics.

African and Other Languages

LING–F 101 Elementary African Languages I: [variable language] (3 cr.) Three (3) credit hours for graduate students; 4 credit hours for undergraduates.

LING–F 102 Elementary African Languages II: [variable language] (3 cr.) Three (3) credit hours for graduate students; 4 credit hours for undergraduates.

LING–F 201 Intermediate African Languages I: [variable language] (3 cr.)

LING–F 202 Intermediate African Languages II: [variable language] (3 cr.)

LING–F 301 Advanced African Languages I: [variable language] (3 cr.)

LING–F 302 Advanced African Languages II: [variable language] (3 cr.)

LING–A 400 Advanced Individual Study of an African Language (1–4; max. 12 cr.)

LING–L 506 Tutorial Instruction in Foreign Languages (arr. cr.)

Bambara/Bamana

LING–B 501 Elementary Bamana I (3 cr.) Introduction to Bamana, major language spoken in Mali and Burkina Faso. Basic grammatical structures and vocabulary. Emphasis is on spoken language, language use in specific social settings. Graduate students will have an individual project to complete. Important cultural points like food, clothing, etc. Videos and Internet resources will be used.

LING–B 502 Elementary Bamana II (3 cr.) P: A grade of C or better in B501 or equivalent proficiency. Second party of a two-semester course. Bamana is spoken in West Africa especially Mali. Basic grammatical structures/ vocabulary, spoken language used in social settings. Videos and Internet resources will be used.

LING–B 601 Intermediate Bamana II (3 cr.) P: A grade of C or better in LING B502 or equivalent proficiency. First part of two-semester course. Studying more complex grammatical structures, emphasis speaking/writing/ reading texts, oral/written compositions, reading, listening comprehension, translation of texts. Cultural events through use of videos, CD-ROMs, Internet.

LING–B 602 Intermediate Bamana II (3 cr.) Study of more complex grammatical structures, with emphasis on active skills: speaking, writing, reading texts. Attention will be on oral/written compositions, reading and listening comprehension, and translation of texts. Graduate students will have an individual project. Description of cultural events through the use of videos, CD-ROMs and the Internet.

LING–B 701 Advanced Bamana I (3 cr.) P: Grade of C or better in LING B602 or equivalent proficiency. Course is first part of a two-semester course. Study of more complex grammatical structures, complex contextual discourse patterns. Advanced readings of traditional, modern literature. Advanced oral, written compositions, listening comprehension, translations. Special projects.

LING–B 702 Advanced Bamana II (3 cr.) P: Grade of C or better in LING B701 or equivalent proficiency. This course is the second part of two-semester course. Requires permission of instructor. Study of complex grammatical structures, contextual discourse patterns. Advanced readings, oral and written compositions, listening comprehension, translation of complex texts. Additional project(s).

Swahili

LING–S 501 Elementary Swahili I (3 cr.) P: Graduate students only. First part/two-semester course. Introduction/Swahili language/culture. Swahili or Kiswahili is a Bantu language spoken in Eastern/Central Africa. Basic grammatical structures and vocabulary. Emphasis is on spoken language: oral/listening comprehension, language use in specific. Videos/Internet resources used. Graduate students will have extra project.

LING–S 502 Elementary Swahili II (3 cr.) P: Grade of C or better in LING S501 or equivalent proficiency. Introduction to Swahili, a Bantu language spoken in East Africa, and aspects of Swahili culture. Basic grammatical structures and vocabulary. Emphasis on spoken language-oral and listening comprehension, language use in specific social settings like the market, school, hospital, doctor's office, among others. Important cultural points like food, clothing, marriage, etc.

LING–S 601 Intermediate Swahili I (3 cr.) P: Grade of C or better in LING S502 or equivalent proficiency. First part of two-semester course. Study of complex grammatical

structures, emphasis on active skills: speaking, writing, reading texts. Attention on oral/written compositions, reading/listening/translation of texts. Graduate students will have an additional project.

LING–S 602 Intermediate Swahili II (3 cr.) P: Grade of C or better in LING S601 or equivalent proficiency. This course is the second part of a two-semester course. Study of more complex grammatical structures, emphasis on active skills: speaking, writing, reading texts, oral and written composition, reading, listening comprehension, text translation. Extra project(s).

LING–S 701 Advanced Swahili I (3 cr.) P: Grade of C or better in LING S602 or equivalent proficiency. This course is the first part of a two-semester course. Study of more complex grammatical structures and of more complex contextual discourse patterns. Advanced readings of oral and written compositions, advanced listening comprehension, and translation of complex texts. Use of Internet resources.

LING–S 702 Advanced Swahili II (3 cr.) P: Grade of C or better in LING S701 or equivalent proficiency. This course is the second part of a two-semester course. Requires permission of instructor. Study of complex grammatical structures, advanced readings of traditional, modern literature. Advanced oral and written compositions, advanced reading and listening comprehension and translation of complex texts from English to Swahili.

Akan

LING–K 501 Elementary Akan I (3 cr.) Introduction to Akan, major language in Ghana. Basic grammatical structures, vocabulary, emphasis on the spoken language, oral, listening comprehension, language use in specific social settings. Graduate students will have individual projects to submit. Important cultural points like food, clothing, marriage, etc. Videos and Internet resources will be used.

LING–K 502 Elementary Akan II (3 cr.) P: Grade of C or better in LING K501 or equivalent proficiency. Introduction to Akan, major language in Ghana. Basic grammatical structures, vocabulary, emphasis on the spoken language, oral, listening comprehension, language use in specific social settings. Graduate students will have individual projects to submit. Important cultural points like food, clothing, marriage, etc. Videos and Internet resources will be used.

LING–K 601 Intermediate Akan I (3 cr.) P: K502 with a grade of C or better or equivalent proficiency. The first course in a two-semester sequence. Study of more complex grammatical structures, with emphasis on active skills: speaking and writing. Attention will be on oral and written compositions, reading and listening comprehension, and translation of texts. Description of cultural events through the use of videos and the Internet.

LING–K 602 Intermediate Akan II (3 cr.) P: Grade of C or better in LING K601 or equivalent proficiency. The second part of a two-semester sequence. Study of more complex grammatical structures, with emphasis on active skills: speaking, writing and reading texts. Attention will be on oral and written composition, reading and listening comprehension, translation from English to Twi and from Twi to English. Description of cultural events shown on video or CD-ROM.

LING–K 701 Advanced Akan I (3 cr.) P: K602 with grade of C or above or equivalent proficiency. Study of more complex grammatical structures and complex contextual discourse patterns. Advanced readings of traditional and modern literature. Advanced oral and written compositions, advanced listening comprehension and translation of complex texts. Use of Internet resources. The course will be completely oriented to the needs of the students enrolled.

LING–K 702 Advanced Akan II (3 cr.) P: Grade of C or better in LING K701 or equivalent proficiency. Study of complex grammatical structures and of more complex contextual discourse patterns. Advanced readings of traditional and modern literature. Advanced oral and written compositions, advanced reading and listening comprehension and translation of complex texts from English to Twi. The course will be completely oriented to the needs of the students enrolled.

Wolof

LING–X 501 Elementary Wolof (3 cr.) This course is an introduction to Wolof language, which aims to teach students basic sounds, basic sentence structure of the language, combining written, oral practice based on cultural aspects of Wolof society. Exercises include oral, listening, and reading comprehension, writing with emphasis on the foreign language national standards.

LING–X 502 Elementary Wolof (3 cr.) P: X501. Continuation of X501. Course provides a deeper knowledge of the Wolof language, culture. The course will be based on communication, cultures, connections, comparisons, and communities of the foreign language. This will enable each student to acquire greater understanding and use the Wolof language to convey feelings, express ideas in language.

LING–X 601 Intermediate Wolof (3 cr.) This is an intermediate Wolof class, a continuation of X501 and X502. Students will deepen basic skills acquired in previous Wolof courses such as pronunciation, reading, speaking, listening and writing.

LING–X 701 Advanced Wolof (3 cr.) Instruction will mostly be in Wolof. Learners will be required to contribute effectively in Wolof in all class discussions and activities. Wolof grammar will be reviewed and exercises assigned to check learners' grasp of grammatical patterns and ability to express themselves appropriately in given communicative situations.

LING–X 702 Advanced Wolof (3 cr.) P: X701. Provide the students a deeper knowledge of Wolof language, cultures, connections, comparisons, and communities. Each student will acquire a greater capacity to understand and use the language. Each student will develop the ability to convey feelings and ideas in the language.

Zulu

LING–Z 501 Elementary Zulu I (3 cr.) The first part of a two-semester sequence. Introduction to Zulu language and culture. Zulu is spoken in South Africa and the neighboring countries of Zimbabwe, Malawi, Namibia, Mozambique Swaziland, and Lesotho by about 10 million people. Basic grammatical structures and

vocabulary, emphasis on the spoken language and cultural awareness.

LING–Z 502 Elementary Zulu II (3 cr.) P: Grade of C or better in LING Z501 or equivalent proficiency. The second part of a two-semester sequence. Basic grammatical structures and vocabulary. Emphasis is on the spoken language—oral and listening comprehension, language use in specific social settings. Videos and internet resources will be used.

LING–Z 601 Intermediate Zulu I (3 cr.) P: Grade of C or better LING Z502 or equivalent proficiency. The first part of a two-semester sequence. Study of more complex grammatical structures, with emphasis on active skills: speaking, writing, and reading texts. Attention will be on oral and written compositions, reading and listening comprehension, and translation of texts. Description of cultural events through the use of videos and the Internet.

LING–Z 602 Intermediate Zulu II (3 cr.) P: Grade of C or better in LING Z601 or equivalent proficiency. The second part of a two-semester sequence. Grade of C or better in LING Z601 or equivalent proficiency. Study of more complex grammatical structures, with emphasis on active skills: speaking, writing, and reading texts. Attention will be on oral and written compositions, reading and listening comprehension, and translation of texts. Descriptions of cultural events through the use of videos and the Internet.

LING–Z 701 Advanced Zulu I (3 cr.) P: Grade of C or better in LING Z602 or equivalent proficiency. The first part of a two-semester sequence. Study of more complex grammatical structures and of more complex contextual discourse patterns. Advanced readings of traditional and modern literature. Advanced oral and written compositions, advanced listening comprehension and translation of complex texts. Use of internet resources.course will be completely oriented to the needs of the students enrolled.

LING–Z 702 Advanced Zulu II (3 cr.) P: Grade of C or better in LING Z701 or equivalent proficiency. The second part of a two-semester sequence. Study of more complex grammatical structures and of more complex contextual discourse patterns. Advanced readings of traditional and modern literature. Advanced oral written compositions, advanced listening comprehension and translation of complex texts. Use of internet resources. The course will be completely oriented to the needs of the students enrolled.

Mass Communications

College of Arts and Sciences
Curriculum

Degree Offered

Program Information

The School of Journalism and the Department of Telecommunications jointly offers a Ph.D. in Mass Communications. This doctoral program prepares students (1) for teaching and research in mass communications, (2) for careers that demand advanced scholarship within professional media organizations, and (3) for careers in government that relate to mass media.

Special Program Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree

See “Doctor of Philosophy Degree in Mass Communications” in the School of Journalism and the Department of Telecommunications entries for admission and degree requirements, course descriptions, and recommended courses in other departments.

Faculty

Co-Directors

Professor Walter Gantz* (Telecommunications) and Professor Emeritus Trevor Brown* (Journalism)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

James Brown* (Journalism), Trevor Brown* (Emeritus, Journalism), Richard Burke* (Emeritus, Telecommunications), Edward J. Castronova* (Telecommunications), Barbara Cherry* (Telecommunications), Dan Drew* (Emeritus, Journalism), Jack Dvorak* (Journalism), Susan Eastman* (Emerita, Telecommunications), Walter Gantz* (Telecommunications), Maria Elizabeth Grabe* (Telecommunications), Peter Jacobi* (Emeritus, Journalism), Annie Lang* (Telecommunications), Shannon Martin* (Journalism), Michael McGregor* (Telecommunications), David P. Nord* (Journalism), Christine L. Ogan* (Emerita, Journalism), Carol Polsgrove* (Emerita, Journalism), Harmeet Singh Sawhney* (Telecommunications), David Waterman* (Telecommunications), David H. Weaver* (Journalism), G. Cleveland Wilhoit* (Emeritus, Journalism), Lars Willnat (Journalism)

Associate Professors

David Boeyink* (Journalism), Bonnie Jeanne Brownlee (Journalism), Erik Page Bucy* (Telecommunications), Claude H. Cookman (Journalism), Mark Deuze* (Telecommunications), Jon Paul Dilts* (Journalism), Michael Evans* (Journalism), Anthony L. Fargo* (Journalism), Julia R. Fox* (Telecommunications), Owen V. Johnson* (Journalism), James Kelly (Journalism), Radhika Parameswaran* (Journalism), Robert Frank Potter* (Telecommunications), Steven Laurence Raymer (Journalism), Amy L. Reynolds* (Journalism), S. Holly Stocking* (Emerita, Journalism), Herbert Terry* (Telecommunications)

Assistant Professors

Andrew James Bucksbarg (Telecommunications), Michael Thomas Conway (Journalism), Hans Ibold (Journalism), Lesa Hatley Major (Journalism), Nicole Martins (Telecommunications), Emily Metzgar (Journalism), Bryant M. Paul (Telecommunications), Andrew Weaver (Telecommunications), W. Joann Wong (Journalism)

Graduate Advisors

Associate Professor Amy L. Reynolds*, Ernie Pyle Hall 200H, (812) 855-8111 (Journalism); Professor Harmeet Singh Sawhney*, Radio-TV Center, (812) 855-0954 (Telecommunications)

Courses

GRAD–G 741 Ph.D. Research in Mass Communications (arr. cr.) **These courses are eligible for a deferred grade.

GRAD–G 790 Readings and Research in Mass Communications (1–3 cr.) **These courses are eligible for a deferred grade.

Mathematical Physics

College of Arts and Sciences
Curriculum

Degree Offered
Doctor of Philosophy

This program offers advanced graduate training for superior students in the overlapping areas of mathematics, theoretical physics, and their applications from a unified point of view and promotes research in this field.

General supervision of the program is controlled by the Interdepartmental Graduate Committee on Mathematical Physics. While no master's degree is offered, a student may qualify for a master's degree in mathematics or physics during the course of study. A student usually enters the program at the beginning of the second year of graduate study in mathematics or physics.

Special Program Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree
Admission Requirements

Students in the Mathematical Physics Program must be enrolled in either the Department of Mathematics or the Department of Physics. Basic preparation should include courses in advanced calculus, linear algebra, modern algebra, complex variables, classical mechanics, electromagnetism, quantum mechanics, modern physics, thermodynamics, and statistical mechanics. Knowledge of the following fields is desirable: real analysis, differential equations, probability, topology, differential geometry, and functional analysis.

Course Requirements

A total of 90 credit hours, including dissertation. Required courses are determined by the advisory committee on the basis of the student's previous training and main fields of interest. (For a starting point, see requirements for Mathematical Physics minor.)

Advisory Committee

Composed of members of both the Department of Mathematics and the Department of Physics.

Minors

Mathematics and physics.

Foreign Language/Research-Skill Requirement

Same as in the department of residence.

Qualifying Examination

Consists of parts of the Departments of Mathematics and Physics qualifying examinations, as determined by the student's advisory committee.

Final Examination

Oral and public defense of dissertation.

Faculty

Interdepartmental Graduate Committee on Mathematical Physics
(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chairperson

Professor Mike Berger* (Physics)

Professors

John Challifour* (Emeritus; Mathematics, Physics), Herbert Fertig* (Physics), Robert Glassey* (Mathematics), David Hoff* (Mathematics), Michael Jolly* (Mathematics), Paul Kirk* (Mathematics), V. Alan Kostelecky* (Physics), Andrew Lenard* (Emeritus; Mathematics, Physics), Roger Newton* (Emeritus, Physics), Gerardo Ortiz* (Physics), Brian Serot* (Physics), Peter Sternberg* (Mathematics), Vladimir Touraev* (Mathematics), Kevin Zumbrun* (Mathematics)

Academic Advisor

Professor Mike Berger*, Swain Hall West 117, (812) 855-2609

Courses

See listings of the Departments of Mathematics and Physics.

Mathematics

College of Arts and Sciences
Departmental E-mail: mathdept@indiana.edu

Departmental URL: www.math.indiana.edu/

Curriculum
Curriculum

Courses
Faculty

Degrees Offered
Master of Arts, Master of Arts for Teachers, and Doctor of Philosophy

Special Departmental Requirements
(See also general University Graduate School requirements.)

Admission Requirements

Undergraduate mathematics major or its equivalent.

Area Options

In order to describe the various concentration requirements, the Department of Mathematics has classified its courses into three areas: pure mathematics, applied mathematics-numerical analysis, and probability-statistics. Each of these areas is further subdivided into fields. Pure mathematics is subdivided into analysis (real and complex), algebra, topology and geometry, and logic and foundations. Applied mathematics-numerical analysis is subdivided into applied mathematics, mechanics, and numerical analysis. Probability-statistics is subdivided into probability and statistics.

Students with a strong interest in Physics might consider the Ph.D. program in Mathematical Physics.

Master of Arts Degree

Course Requirements

A total of 30 credit hours, of which 18 credit hours must be mathematics courses at the 500 to 700 level, excluding M553, M555, M556, M595, M596, and M599. The total coursework submitted must include courses satisfying one of the following options and must be approved by the director of graduate studies.

1. Applied Mathematics Option. Courses including M511, M513, and at least two of the following: M540, M541, M544, M545, M571, M572. In addition, the student must take at least one 3 credit hour graduate course outside the Department of Mathematics.
2. Pure Mathematics Option. At least 6 credit hours in each of three of the following groups: algebra, analysis, applied mathematics and numerical analysis, logic and foundations, probability and statistics, topology and geometry, outside area (biology, psychology, computer science, economics, chemistry, physics, and others).
3. Statistics Option. M511, M563, M566, and at least two of the following: M564, M567, M568, Economics E671, or any other approved course outside the Department of Mathematics.

Master of Arts for Teachers Degree

Course Requirements

A total of 36 credit hours, with at least one 3 credit hour course in each of the following groups: algebra, analysis, probability and statistics, topology and geometry, applied mathematics and numerical analysis.

Restrictions

Only Department of Mathematics graduate courses numbered 400 or higher count toward the 20 credit hours required in the major; up to 6 credit hours of courses below 400 accepted, with consent of the director of graduate studies, in partial fulfillment of the remaining 16 credit hours.

Doctor of Philosophy Degree

Course Requirements

The following course requirements are designed to provide the broad background needed for the successful pursuit of research leading to the dissertation. Students must complete 36 credit hours in mathematics at the 500, 600, or 700 level, excluding M553, M555, M556, M595-M596, and M599, and, in addition, must complete 2 credit hours in M599. Their program of study will depend upon their background and interests. Students should formulate a program in consultation with their faculty advisor. The total coursework submitted for the degree must satisfy one of the options below. Reading courses may not be used to satisfy the requirements of these options unless they are specifically approved by the graduate director. A dissertation is required.

1. Applied Mathematics Option. Students must complete M511-M512, M513, and M540-M541. Students must also complete either 6 credit hours of graduate credit outside the Department of Mathematics in an area conducive to mathematical treatment and approved by the student's advisor, or 12 credit hours of graduate credit that is cross-listed with the Department of Physics. In addition, students must complete 6 credit hours of graduate credit in each of two of the following groups:

- Algebra, and logic and foundations
- Topology and geometry
- Numerical analysis, probability, and statistics

2. Pure Mathematics Option. Students must complete 6 credit hours of graduate credit in five of the following groups, including 6 credit hours of 500-level courses in two of groups 1-4, and 6 credit hours of 500-level courses in another of groups 1-6.

- Analysis
- Algebra
- Topology and geometry
- Logic and foundations
- Probability and statistics
- Applied mathematics and numerical analysis
- Outside and miscellaneous courses (cryptography, quantum computing, financial mathematics, computer science, economics, and physics are commonly used, but others may also be appropriate). Any courses in this category must be approved by your advisor and the director of graduate studies.

3. Statistics Option. Each student's program should be arranged to include work in mathematics, mathematical statistics, probability, and the application of statistics to some particular field. Students must complete 6 hours of graduate credit in other departments in courses approved by their advisor, as well as M511-M512, M563-M564, M566-M567, and 6 hours of graduate credit in each of two of the following groups:

- Applied mathematics and numerical analysis
- Algebra
- Complex analysis
- Topology and geometry
- Computer science

Minor

You must complete a minor in mathematics, or in some other department. If you choose to minor in another department, you must satisfy that department's requirements as described in the University Graduate School Bulletin and have that department notify the

Department of Mathematics Graduate Office that you have done so. To complete a minor in mathematics itself, there are two possible options:

1. Nine credit hour minor. This requires 9 credit hours of coursework at the 500-700 level in an area (Pure Mathematics, Applied Mathematics, or Probability and Statistics) different from that of the dissertation. This area then becomes the “area for minor” while forming the Research Committee (see below).
2. Twelve credit hour minor. This requires 6 credit hours of coursework at the 500-700 level in each of two fields (Analysis, Algebra, Topology and Geometry, Logic and Foundations, Applied Mathematics [Differential Equations], Mathematical Physics, Numerical Analysis, Probability, Statistics) other than that of the dissertation. One of the fields chosen must be in an area (Pure Mathematics, Applied Mathematics, Probability and Statistics) other than that of the dissertation. Any of these two fields can be chosen as the “minor field” while forming the Research Committee (see below). In addition, reading courses (e.g., M800) and courses taken at the other universities will not satisfy the course requirements for the Ph.D. minor.

Foreign Language Requirement

Reading proficiency in one foreign language in which major research articles in mathematics are published. Acceptable languages are German, French, and Russian or another language deemed to be more relevant by the dissertation advisor. The Graduate Policy Committee of the Department of Mathematics will consider petitions for substituting other languages.

Qualifying Examinations

The Department of Mathematics qualifying exam comprises a three-tier system designed to help determine as quickly and efficiently as possible whether students have mastered basic graduate-level mathematics, exhibit the necessary abilities and self-discipline, and have prepared themselves to pursue the independent research necessary for the Ph.D. within a two- to three-year time frame.

Tier 1 (Comprehensive 400-Level Written Exams)

Ph.D. students will take a two-part written exam on 400-level algebra and analysis. The exams will be given during the week before classes begin in the fall and in the spring. New students may take either or both of the Tier 1 exams in August when they first arrive. A student is allowed to try each exam each time it is offered, but s/he must pass both exams prior to the end of the second year of study.

Syllabi, references, and sample problems for these exams are available in the Department of Mathematics graduate office.

Tier 2 (Committee Review)

Each May, a departmental committee will review the record of every student who has either:

- Completed two years in the program without previous review, or
- Passed the Tier 1 exams on entrance to the program and elects the review at the end of the first year.

The review committee will decide which students may continue toward Ph.D. candidacy. The committee’s considerations will include:

- Performance on the Tier 1 exams.
- Performance in 500-level coursework.
- A report from the student’s academic advisor (see below).
- Written personal statement by student.
- Student’s performance of assistantship duties.

As indicated above, students can accelerate their progress in the program by passing the Tier 1 exams on entrance into the program and electing the Tier 2 review at the end of their first year. The review committee will treat this as favorable for a student’s case. Students who do not get a recommendation to continue will be encouraged to complete the M.A. degree. If they have financial support at the time of review, they will be entitled to at least one additional semester of support in order to do so.

Tier 3 (Oral Exam)

After the Tier 2 review, students must arrange and pass a Qualifying Oral Exam before October of their fourth year. The student will seek the direction of a faculty member as a scientific advisor a “tentative Ph.D. advisor” for this exam. The faculty member will assign a reading list consisting of texts and research-level papers; this material will comprise the major topic of the exam. The student will also propose a minor area, to be approved by the director of graduate studies. If and when the scientific advisor feels the student is ready for the exam, the advisor will arrange for a three-member faculty committee to administer the exam. These exams are projected to last approximately two hours, and one of the committee members must be qualified to examine the student in the minor area, where the student must demonstrate 500-level mastery. In order to pass the exam, the student must:

- Demonstrate a level of mathematical ability and maturity sufficient for successfully undertaking a Ph.D. dissertation (normally in the major area of the exam), and
- Identify a faculty member willing to serve as Ph.D. advisor. This will typically, but not necessarily, be the faculty member who organized the exam.

Two aspects of the graduate program that directly support this three-tiered system bear mention:

1. A faculty advisor will be assigned to every entering student. The advisor will be expected to follow the student’s progress in both coursework and instructional duties, and to write a short report for the Tier 2 review committee at the appropriate time.
2. Grades in 500-level courses will be given and evaluated according to the following guidelines:

- A grade of A means that, based on the student’s work in that course, the instructor believes the student will succeed in being admitted to Ph.D. candidacy.
- A grade of B means that the student’s work in that course is satisfactory, but the instructor has reservations (based on that work) about the student’s ability to be admitted to candidacy.

All students must maintain at least a B average in their coursework, in accordance with currently published departmental and university guidelines. Tier 1 exams are administered at the end of the week before classes begin in August and January, and will be allotted at least four hours (the intention is that time should not be a serious constraint).

Ph.D. Minor in Mathematics

Doctoral students in other departments may complete a minor in mathematics by satisfying one of the following options: (1) 9 credit hours of mathematics courses at the 400 level or above, or (2) M343-M344 and 6 credit hours of mathematics courses at the 400 level or above. Reading courses (e.g., M800) and courses taken at other universities will not satisfy the course requirements for the Ph.D. minor.

Faculty

Chairperson
Professor Kevin Zumbrun*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

College Professor

Roger Meyer Temam*

Distinguished Professor

Ciprian Foias* (Emeritus)

William H. Boucher Professor

Vladimir Touraev*

Professors

Goro Azumaya* (Emeritus), S. Thomas Bagby* (Emeritus), Eric D. Bedford*, Grahame Bennett* (Emeritus), Hari Bercovici*, Rabi Bhattacharya* (Emeritus), Richard C. Bradley*, John Brothers* (Emeritus), Arlen Brown* (Emeritus), John Challifour* (Emeritus, Physics), Mihai Ciucu*, Jiri Dadok*, James F. Davis*, Vinay Deodhar*, Allan L. Edmonds*, David Fisher*, Marlies Gerber*, Robert T. Glassey* (Emeritus), Victor W. Goodman* (Emeritus), Darrell Eugene Haile*, David C. Hoff*, Elizabeth Housworth*, Jan Jaworowski* (Emeritus), Michael S. Jolly*, Nets Hawk Katz*, Paul A. Kirk*, Jee Heub Koh*, Michael J. Larsen*, Andrew Lenard* (Emeritus, Physics), Charles Livingston*, Morton Lowengrub* (Emeritus), Valery Lunts*, Russell Lyons*, Daniel P. Maki* (Emeritus), Lawrence S. Moss*, Kent E. Orr*, Sergey Ivanovich Pinchuk*, Madan Puri* (Emeritus), Billy Rhoades* (Emeritus), Bruce Michael Solomon*, George Springer* (Emeritus, Computer Science), Joseph Stampfli* (Emeritus), Peter J. Sternberg*, Maynard Thompson* (Emeritus), Alberto Torchinsky*, Shouhong Wang*, William Ziemer* (Emeritus), Kevin R. Zumbrun*

Associate Professors

Scott W. Brown*, Christopher G. Connell*, Christopher Martin Judge*, Ayelet E. Lindenstrauss*, Robert MacKenzie* (Emeritus), Michael Mandell*, Kevin Michael Pilgrim*, Ji-Ping Sha*, Matthias Strauch, Matthias Weber*, William H. Wheeler*

Assistant Professors

Ciprian Demeter*, Matvei Libine

Director of Graduate Studies

Associate Professor Ji-Ping Sha*, Rawles Hall 130, (812) 855-3700

Courses

Students are advised to begin their study of a field with 400-level courses, unless their preparation in that field has been very good. M.A.T. students in mathematics, or M.A., M.S., or Ph.D. students in other departments, may receive graduate credit for any 400-level course that appears in this bulletin. Candidates for the M.A. or Ph.D. in mathematics should note that some 400-level courses do not satisfy certain degree requirements (see footnotes).

In the following list, the middle digit of the course number indicates the field of mathematics: x0y, algebra; x1y, analysis; x2y, topology; x3y, geometry; x4y, applied mathematics; x5y, mechanics; x6y, probability and statistics; x7y, numerical analysis; x8y, history and foundations.

MATH–M 403 Introduction to Modern Algebra I (3 cr.)

MATH–M 404 Introduction to Modern Algebra II (3 cr.)

MATH–S 403 Honors Course in Modern Algebra I (3 cr.)

MATH–S 404 Honors Course in Modern Algebra II (3 cr.)

MATH–T 403 Modern Algebra for Secondary Teachers (3 cr.)

MATH–M 405 Number Theory (3 cr.) P: M212 (Bloomington campus only)

MATH–M 409 Linear Transformations (3 cr.)

MATH–M 413 Introduction to Analysis I (3 cr.)

MATH–M 414 Introduction to Analysis I (3 cr.)

MATH–M 415 Elementary Complex Variables with Applications (3 cr.)

MATH–M 420 Metric Space Topology (3 cr.)

MATH–M 425 Graph Network Theory and Combinatorial Analysis (3 cr.)

MATH–M 435 Introduction to Differential Geometry (3 cr.)

MATH–M 436 Introduction to Geometries (3 cr.)

MATH–M 441 Introduction to Partial Differential Equations with Applications I (3 cr.)

MATH–M 442 Introduction to Partial Differential Equations with Applications II (3 cr.)

MATH–M 447 Mathematical Models and Applications I (3 cr.)

MATH–M 448 Mathematical Models and Applications II (3 cr.)

MATH–M 463 Introduction to Probability Theory I (3 cr.)

MATH–M 464 Introduction to Probability Theory II (3 cr.)

MATH–M 466 Introduction to Mathematical Statistics (3 cr.)

MATH–M 471 Numerical Analysis I (3 cr.) P: M301 or M303, M311, M343, and knowledge of a computer language such as Fortran, C, or C++. (Students with other programming backgrounds should consult the instructor.)

MATH–M 472 Numerical Analysis II (3 cr.) P: M301 or M303, M311, M343, and knowledge of a computer language such as Fortran, C, or C++. (Students with other programming backgrounds should consult the instructor.)

MATH–M 482 Mathematical Logic (3 cr.)

MATH–M 490 Problem Seminar (3 cr.)

MATH–T 490 Topics for Elementary Teachers (3 cr.) P: T103 or equivalent. Development and study of a body of mathematics specifically designed for experienced elementary teachers. Examples include probability, statistics, geometry, and algebra. Open only to graduate elementary teachers with consent of the instructor. (Does not count toward the area requirements for the M.A. and Ph.D. degrees in mathematics.)

MATH–M 501 Survey of Algebra (3 cr.) P: M403-M404. Groups with operators: Jordan-Holder theorem. Sylow theorems. Rings: localization of rings; Chinese remainder theorem. Modules over principal ideal domains: invariants. Fields: algebraic closure; separable and inseparable algebraic extensions; Galois theory; finite fields.

MATH–M 502 Commutative Algebra (3 cr.) P: M501. Field theory: transcendental extensions; separable extensions; derivations. Modules: Noetherian and Artinian modules. Primary modules; primary decomposition; Krull intersection theorem. Commutative rings: height and depth of prime ideals. Integral extensions. Notions of algebraic geometry: algebraic sets; Hilbert Nullstellensatz; local rings.

MATH–M 503 Noncommutative Algebra (3 cr.) P: M501. Simple and semisimple modules; density theorem; Wedderburn-Artin theorem. Simple algebras: automorphisms; splitting fields; Brauer groups. Representations of finite groups: characters; induced characters; applications.

MATH–M 505 Basic Number Theory I (3 cr.) P: M403-M404. Congruence, units modulo n, lattices and abelian groups, quadratic residues, arithmetic functions, diophantine equations, Farey fractions, continued fractions, partition function, the Sieve method, density of subsets of integers, zeta function, the prime number theorem.

MATH–M 506 Basic Number Theory II (3 cr.) P: M403-M404. Congruence, units modulo n, lattices and abelian groups, quadratic residues, arithmetic functions, diophantine equations, Farey fractions, continued fractions, partition function, the Sieve method, density of subsets of integers, zeta function, the prime number theorem.

MATH–M 507 Introduction to Lie Algebras and Lie Groups (3 cr.) P: M403-M404, and M409 or M501. Nilpotent, solvable, and semisimple Lie algebras, exponential map, PBW theorem, Killing form, Cartan subalgebras, root systems, Weyl group, classification and representations of complex semisimple Lie algebras, Schur's lemma, maximal weight modules; correspondence between real Lie algebras and Lie groups, compact Lie groups, complex and real semisimple Lie groups, symmetric spaces.

MATH–M 508 Introduction to Lie Algebras and Lie Groups (3 cr.) P: M403-M404, and M409 or M501. Nilpotent, solvable, and semisimple Lie algebras, exponential map, PBW theorem, Killing form, Cartan subalgebras, root systems, Weyl group, classification and representations of complex semisimple Lie algebras, Schur's lemma, maximal weight modules; correspondence between real Lie algebras and Lie groups, compact Lie groups, complex and real semisimple Lie groups, symmetric spaces.

MATH–M 509 Representations of Finite Groups (3 cr.) P: M409 or equivalent. Groups, subgroups. Homomorphisms, isomorphisms. Transformation groups. The orthogonal and Euclidean groups O(3) and E(3). Symmetry and discrete subgroups of E(3). Crystallographic groups. Group representations. Reducible and irreducible representations. Group characters and character tables. Representations of the symmetric groups. Young tableaux. Symmetry classes of tensors.

MATH–M 511 Real Variables I (3 cr.) Sets and functions, cardinal and ordinal numbers, set functions, kinds of measures, integration, absolute continuity, convergence theorems, differentiation and integration. Normed linear spaces, function spaces, linear functionals, Banach spaces, Hilbert spaces, Fourier transforms, Schwartz class.

MATH–M 512 Real Variables II (3 cr.) Sets and functions, cardinal and ordinal numbers, set functions, kinds of measures, integration, absolute continuity, convergence theorems, differentiation and integration. Normed linear spaces, function spaces, linear functionals, Banach spaces, Hilbert spaces, Fourier transforms, Schwartz class.

MATH–M 513 Complex Variables I (3 cr.) Algebra, topology, and geometry of the complex plane; analytic functions; conformal mapping; Riemann surfaces; Cauchy’s theorem and formula; convergence theorems; infinite series and products; Riemann mapping theorem.

MATH–M 514 Complex Variables II (3 cr.) Algebra, topology, and geometry of the complex plane; analytic functions; conformal mapping; Riemann surfaces; Cauchy’s theorem and formula; convergence theorems; infinite series and products; Riemann mapping theorem.

MATH–M 518 Fourier Analysis (3 cr.) The course will cover basic facts of Fourier series and orthogonal sets of functions, Fourier transforms, and applications. Different convergence properties of the Fourier, Haar, and Sturm-Liouville expansions will be considered. As time permits, applications to discrete and fast Fourier transforms, and wavelets, will be discussed.

MATH–M 521 Topology I (3 cr.) Point-set topology, including connectedness, compactness, separation properties, products, quotients, metrization, function spaces. Elementary homotopy theory including fundamental group and covering spaces. Introduction to homology theory with applications such as the Brouwer Fixed Point Theorem.

MATH–M 522 Topology II (3 cr.) Point-set topology, including connectedness, compactness, separation properties, products, quotients, metrization, function spaces. Elementary homotopy theory including fundamental group and covering spaces. Introduction to homology theory with applications such as the Brouwer Fixed Point Theorem.

MATH–M 529 Introduction to Differential Topology (3 cr.) P: M303, M413, or equivalent. Derivatives and tangents; Inverse Function Theorem; immersions and submersions; Sard's Theorem. Manifolds; imbedding manifolds. Applications: intersections and degrees (mod 2); Brouwer Fixed Point Theorem. Orientation of manifolds; Euler characteristic; Hopf Degree Theorem.

MATH–M 533 Differential Geometry I (3 cr.) Differentiable manifolds, multilinear algebra, and tensor bundles. Vector fields, connections, and general integrability theorems. Riemannian manifolds, curvatures, and topics from the calculus of variations.

MATH–M 534 Differential Geometry II (3 cr.) Differentiable manifolds, multilinear algebra, and tensor bundles. Vector fields, connections, and general integrability theorems. Riemannian manifolds, curvatures, and topics from the calculus of variations.

MATH–M 540 Partial Differential Equations I (3 cr.) P: M441-M442 or equivalent. Introduction to distributions, Sobolev spaces, and Fourier transforms; elliptic equations, Hilbert space theory, potential theory, maximum principle; parabolic equations and systems, characteristics, representations of solutions, energy methods; applications and examples.

MATH–M 541 Partial Differential Equations II (3 cr.) P: M441-M442 or equivalent. Introduction to distributions, Sobolev spaces, and Fourier transforms; elliptic equations, Hilbert space theory, potential theory, maximum principle; parabolic equations and systems, characteristics, representations of solutions, energy methods; applications and examples.

MATH–M 542 Nonlinear Partial Differential Equations (3 cr.) P: M441-M442 or equivalent. Introduction to an array of topics in linear and nonlinear PDE including elements of calculus of variations and applications to nonlinear elliptic PDE, systems of conservation laws, semi-group theory, reaction-diffusion equations, Schauder theory, Navier-Stokes equations, bifurcation theory.

MATH–M 544 Ordinary Differential Equations I (3 cr.) P: M413-M414 or consent of instructor. Existence, uniqueness, continuous dependence; linear systems, stability theory, Floquet theory; periodic solutions of nonlinear equations; Poincaré-Bendixson theory, direct stability methods; almost periodic motions; spectral theory of nonsingular and singular self-adjoint boundary-value problems; two-dimensional autonomous systems; the saddle-point property; linear systems with isolated singularities.

MATH–M 545 Ordinary Differential Equations II (3 cr.) P: M413-M414 or consent of instructor. Existence, uniqueness, continuous dependence; linear systems, stability theory, Floquet theory; periodic solutions of nonlinear equations; Poincaré-Bendixson theory, direct stability methods; almost periodic motions; spectral theory of nonsingular and singular self-adjoint boundary-value problems; two-dimensional autonomous systems; the saddle-point property; linear systems with isolated singularities.

MATH–M 546 Control Theory (3 cr.) Examples of control problems; optimal control of deterministic systems: linear and nonlinear. The maximal principle: stochastic control problems.

MATH–M 548 Mathematical Methods for Biology (3 cr.) P: M414, M463. Deterministic growth models. Birth-death processes and stochastic models for growth. Mathematical theories for the spread of epidemics. Quantitative population genetics.

MATH–M 551 Markets and Multi-Period Asset Pricing (3 cr.) P: M463, M345, or equivalent. The concepts of arbitrage and risk-neutral pricing are introduced within the context of dynamic models of stock prices, bond prices, and currency exchange rates. Specific models include multi-period binomial models, Markov processes, Brownian motion, and martingales.

MATH–M 553 Cryptography (3 cr.) P: M301 or M303. ***Does not count toward the 500-level requirements. Covers encryption and decryption in secure codes. Topics include: cryptosystems and their cryptanalysis, Data Encryption Standard, differential cryptanalysis, Euclidean algorithm, Chinese remainder theorem, RSA cryptosystem, primality testing, factoring algorithms, ElGamal cryptosystem, discrete log problem, other public key cryptosystems, signature schemes, hash functions, key distribution, and key agreement. Credit not given for both M553 and M453.

MATH–M 555 Quantum Computing I (3 cr.) ***Does not count toward the 500-level requirements. Covers the interdisciplinary field of quantum information science for graduate students in computer science, physics, mathematics, philosophy, and chemistry. Quantum information science is the study of storing, processing, and communicating information using quantum systems.

MATH–M 556 Quantum Computing II (3 cr.) ***Does not count toward the 500-level requirements. Covers the interdisciplinary field of quantum information science for graduate students in computer science, physics, mathematics, philosophy, and chemistry. Quantum information science is the study of storing, processing, and communicating information using quantum systems.

MATH–M 557 Introduction to Dynamical Systems and Ergodic Theory (3 cr.) Iteration of mappings, flows. Topological, smooth, measure-theoretic, and symbolic dynamics. Recurrence and chaos. Ergodic theory, spectral theory, notions of entropy. Low-dimensional phenomena; hyperbolicity; structural stability and rigidity. Application to number theory, data storage, Internet search and Ramsey theory.

MATH–M 558 Introduction to Dynamical Systems and Ergodic Theory (3 cr.) Iteration of mappings, flows. Topological, smooth, measure-theoretic, and symbolic dynamics. Recurrence and chaos. Ergodic theory, spectral theory, notions of entropy. Low-dimensional phenomena; hyperbolicity; structural stability and rigidity. Application to number theory, data storage, Internet search and Ramsey theory.

MATH–M 560 Applied Stochastic Processes (3 cr.) P: M343, M463, or consent of instructor. Simple random walk as approximation of Brownian motion. Discrete-time Markov chains. Continuous-time Markov chains; Poisson, compound Poisson, and birth-and-death chains; Kolmogorov's backward and forward equations; steady state. Diffusions as limits of birth-and-death processes. Examples drawn from diverse fields of application.

MATH–M 563 Theory of Probability I (3 cr.) P: M463, M512; or consent of instructor. Basic concepts of measure theory and integration, axiomatic foundations of probability theory, distribution functions and characteristic functions, infinitely divisible laws and the central limit problem, modes of convergence of sequences of random variables, ergodic theorems, Markov chains, and stochastic processes.

MATH–M 564 Theory of Probability II (3 cr.) P: M463, M512; or consent of instructor. Basic concepts of measure theory and integration, axiomatic foundations of probability theory, distribution functions and characteristic functions, infinitely divisible laws and the central limit problem, modes of convergence of sequences of random variables, ergodic theorems, Markov chains, and stochastic processes.

MATH–M 566 Mathematical Statistics I (3 cr.) P: M466, M512; or consent of instructor. Modern statistical inference, including such topics as sufficient statistics with applications to similar tests and point estimates, unbiased and invariant tests, lower bounds for mean square errors of point estimates, interval estimation, linear hypothesis, analysis of variance, sequential analysis, decision functions, and nonparametric inference.

MATH–M 567 Mathematical Statistics II (3 cr.) P: M466, M512; or consent of instructor. Modern statistical inference, including such topics as sufficient statistics with applications to similar tests and point estimates, unbiased and invariant tests, lower bounds for mean square errors of point estimates, interval estimation, linear hypothesis, analysis of variance, sequential analysis, decision functions, and nonparametric inference.

MATH–M 568 Time Series Analysis (3 cr.) P: M466 or consent of instructor. Trends, linear filters, smoothing. Stationary processes, autocorrelations, partial autocorrelations. Autoregressive, moving average, and ARMA processes. Fitting of ARMA and related models. Forecasting. Seasonal time series. Spectral density of stationary processes. Periodograms and estimation of spectral density. Bivariate time series, cross-correlations, cross-spectrum. Other topics as time permits. Equivalent to STAT S650.

MATH–M 571 Analysis of Numerical Methods I (3 cr.) P: M441-M442 and M413-M414. Solution of systems of linear equations, elimination and iterative methods, error analyses, eigenvalue problems; numerical methods for integral equations and ordinary differential equations; finite difference, finite element, and Galerkin methods for partial differential equations; stability of methods.

MATH–M 572 Analysis of Numerical Methods II (3 cr.) P: M441-M442 and M413-M414. Solution of systems of linear equations, elimination and iterative methods, error analyses, eigenvalue problems; numerical methods for integral equations and ordinary differential equations; finite difference, finite element, and Galerkin methods for partial differential equations; stability of methods.

MATH–M 583 Set Theory (3 cr.) P: M482 or M511 or M521. Zermelo-Fraenkel axioms for set theory, well-foundedness and well-orderings, induction and recursion, ordinals and cardinals, axiom of choice, cardinal exponentiation, generalized continuum hypothesis, infinite combinatorics and large cardinals. Martin's axiom, applications to analysis and topology.

MATH–M 584 Recursion Theory (3 cr.) P: One of M482, M511, M521 or CSCI C452; or consent of instructor. Classes of recursive functions, models of computation, Church's thesis, normal forms, recursion theorem, recursively enumerable sets, reducibilities, lattice of r.e. sets, jump operator, priority arguments, degrees of unsolvability, and hierarchies.

MATH–M 590 Seminar (3 cr.)

MATH–M 595 Seminar in the Teaching of College Mathematics I (1 cr.) Methods of teaching undergraduate college mathematics. Does not count toward meeting any of the 500-level requirements toward an M.A. or Ph.D.

MATH–M 596 Seminar in the Teaching of College Mathematics II (1 cr.) Methods of teaching undergraduate college mathematics. Does not count toward meeting any of the 500-level requirements toward an M.A. or Ph.D.

MATH–M 599 Colloquium (1 cr.) Attendance at Department of Mathematics colloquia required. May not be used in fulfillment of the 36 credit hours of 500-, 600-, or 700-level coursework required for the Ph.D. Also not applicable to 30 credit hours for master's degree.

MATH–M 601 Algebraic Number Theory I (3 cr.) P: M501-M502. Valuations, fields of algebraic functions, cohomology of groups, local and global class field theory.

MATH–M 602 Algebraic Number Theory II (3 cr.) P: M501-M502. Valuations, fields of algebraic functions, cohomology of groups, local and global class field theory.

MATH–M 607 Group Representations I (3 cr.) P: Consent of instructor. Review of abstract group theory. Representation theory of finite and infinite compact groups. Detailed study of selected classical groups. Lie groups, covering groups, Lie algebras, invariant measure and induced representations. May be taught in alternate years by members of the Departments of Mathematics and Physics; see PHYS P607.

MATH–M 608 Group Representations II (3 cr.) P: Consent of instructor. Review of abstract group theory. Representation theory of finite and infinite compact groups. Detailed study of selected classical groups. Lie groups, covering groups, Lie algebras, invariant measure and induced representations. May be taught in alternate

years by members of the Departments of Mathematics and Physics; see PHYS P607.

MATH–M 611 Functional Analysis I (3 cr.) Fundamentals of the theory of vector spaces; Banach spaces; Hilbert space. Linear functionals and operators in such spaces, spectral resolution of operators. Functional equations: applications to fields of analysis, such as integration and measure, integral equations, ordinary and partial differential equations, ergodic theory. Nonlinear problems. Schauder-Leray fixed-point theorem and its applications to fundamental existence theorems of analysis.

MATH–M 612 Functional Analysis II (3 cr.) Fundamentals of the theory of vector spaces; Banach spaces; Hilbert space. Linear functionals and operators in such spaces, spectral resolution of operators. Functional equations: applications to fields of analysis, such as integration and measure, integral equations, ordinary and partial differential equations, ergodic theory. Nonlinear problems. Schauder-Leray fixed-point theorem and its applications to fundamental existence theorems of analysis.

MATH–M 621 Algebraic Topology I (3 cr.) Basic concepts of homological algebra, universal coefficient theorems for homology and cohomology, Künneth formula, duality in manifolds. Homotopy theory including Hurewicz and Whitehead theorems, classifying spaces, Postnikov systems, spectral sequences, homotopy groups of spheres. Offered every other year, alternating with M623-M624.

MATH–M 622 Algebraic Topology II (3 cr.) Basic concepts of homological algebra, universal coefficient theorems for homology and cohomology, Künneth formula, duality in manifolds. Homotopy theory including Hurewicz and Whitehead theorems, classifying spaces, Postnikov systems, spectral sequences, homotopy groups of spheres. Offered every other year, alternating with M623-M624.

MATH–M 623 Geometric Topology I (3 cr.) P: M522. Topics in geometric topology chosen from K-theory, simple homotopy theory, topology of manifolds, fiber bundles, knot theory, and related areas. May be taken more than once. Offered every other year, alternating with M621-M622.

MATH–M 624 Geometric Topology II (3 cr.) P: M522. Topics in geometric topology chosen from K-theory, simple homotopy theory, topology of manifolds, fiber bundles, knot theory, and related areas. May be taken more than once. Offered every other year, alternating with M621-M622.

MATH–M 630 Algebraic Geometry (3 cr.) P: M522. A study in the plane, based on homogeneous point and line coordinates; a study of algebraic curves and envelopes, including such topics as invariants, singularities, reducibility, genus, polar properties, Pascal and Brainchon theorems, and Jacobian, Hessian, and Plücker formulas.

MATH–M 633 Algebraic Varieties I (3 cr.) Geometric and cohomological properties of algebraic varieties and schemes.

MATH–M 634 Algebraic Varieties II (3 cr.) Geometric and cohomological properties of algebraic varieties and schemes.

MATH–M 635 Relativity I (3 cr.) Mathematical foundations of the theory of relativity. Lorentz groups, Michelson-Morley experiment, aberration of stars, Fizeau experiment, kinematic effects, relativistic second law of Newton, relativistic kinetic energy, Maxwell equations, ponderomotive equations. Curvature tensor and its algebraic identities, Bianchi's identity, gravitation and geodesics. Schwarzschild solution, relativistic orbits, deflection of light.

MATH–M 636 Relativity II (3 cr.) Mathematical foundations of the theory of relativity. Lorentz groups, Michelson-Morley experiment, aberration of stars, Fizeau experiment, kinematic effects, relativistic second law of Newton, relativistic kinetic energy, Maxwell equations, ponderomotive equations. Curvature tensor and its algebraic identities, Bianchi's identity, gravitation and geodesics. Schwarzschild solution, relativistic orbits, deflection of light.

MATH–M 637 Theory of Gravitation I (3 cr.) Introduction to the general theory of relativity, stress-energy tensor, parallel transport, geodesics, Einstein's equation, differential geometry, manifolds, general covariance, bending of light, perihelion advance. Modern cosmology: Robertson-Walker metric, equations of state, Friedmann equations, Hubble's law, redshift, cosmological constant, inflation, quintessence, cosmic microwave background, Big Bang nucleosynthesis, structure formation. May be taught in alternate years by members of the Department of Physics; see PHYS P637.

MATH–M 638 Theory of Gravitation II (3 cr.) Gravitation waves, Schwarzschild geometry and black holes, Kerr metric, Reissner-Nordstrom metric, extremal black holes, Penrose diagrams, Hawking radiation, Lie derivatives, isometries and Killing vectors, variational principle and the Palatini formalism, spinors in general relativity, vierbeins, gravitation as a gauge theory, quantum gravity. May be taught in alternate years by members of the Department of Physics; see PHYS P638.

MATH–A 641 Elliptic Differential Equations (3 cr.) P: M511, M513, M540, or consent of instructor. Green's identity, fundamental solutions, function theoretic methods, partition of unity, weak and strong derivatives, Sobolev inequalities, embedding theorems, Garding's inequality, Dirichlet problem, existence theory, regularity in the interior, regularity on the boundary, and selected topics.

MATH–A 642 Evolution Equations (3 cr.) P: M511, M513, M540, or consent of instructor. Hyperbolic equations and systems, parabolic equations, Cauchy problems in higher dimension, method of descent, fundamental solutions and their construction, strongly continuous semigroups, analytic semigroups, uniqueness theorems in Hilbert space, fractional powers of operators, analyticity of solutions, and selected topics.

MATH–A 643 Integral Equations (3 cr.) P: M511, M513, M540, or consent of instructor. Covers the Volterra-Fredholm theory of integral equations and the abstract Riesz theory of compact operators. Other topics include ideals of compact operators, Fredholm operators,

convolution equations and their relationship to Toeplitz operators, Wiener-Hopf factorization.

MATH–A 647 Mathematical Physics (3 cr.) P: M541 or consent of instructor. Applications of the theory of normed linear spaces, distributions, unbounded operators in Hilbert space, and related topics to problems in mathematical physics. May be taught in alternate years by members of the Department of Physics; see PHYS P647.

MATH–A 655 Mathematical Foundations of Quantum Mechanics (3 cr.) P: Consent of instructor. Philosophical and mathematical analysis of the concepts: quantum observable, compatibility, quantum state, superposition principle, symmetry. Axiomatic construction of conventional quantum mechanics. May be taught in alternate years by members of the Department of Physics; see PHYS P655.

MATH–A 656 Kinetic Theory and Statistical Mechanics I (3 cr.) Introduction to the classical theory and modern developments. Historical development of kinetic-statistical theories; rigorous equilibrium statistics; kinetic gas dynamics according to Boltzmann equation; kinetic theories of transport processes in liquids. May be taught in alternate years by members of the Departments of Mathematics and Physics; see PHYS P656-P657.

MATH–A 657 Kinetic Theory and Statistical Mechanics I (3 cr.) Introduction to the classical theory and modern developments. Historical development of kinetic-statistical theories; rigorous equilibrium statistics; kinetic gas dynamics according to Boltzmann equation; kinetic theories of transport processes in liquids. May be taught in alternate years by members of the Departments of Mathematics and Physics; see PHYS P656-P657.

MATH–A 658 Continuum Mechanics I (3 cr.) P: Consent of instructor. Two-semester course dealing with mathematical foundations of continuum mechanics; content varies yearly; topics selected from elasticity, plasticity, or fluid mechanics and related areas.

MATH–A 659 Continuum Mechanics II (3 cr.) P: Consent of instructor. Two-semester course dealing with mathematical foundations of continuum mechanics; content varies yearly; topics selected from elasticity, plasticity, or fluid mechanics and related areas.

MATH–M 663 Weak Convergence of Probability Measures and Applications (3 cr.) P: M512, M564. Weak convergence of probability measures on metric spaces. Prohorov's theorem and tightness. Brownian motion. Donsker's invariance principle. Weak convergence on D [0,1]. Convergence of empirical distributions. Functional central limit theorems under dependence.

MATH–M 664 Large Sample Theory of Statistics (3 cr.) P: M563, M566. Asymptotic distributions of sample moments, sample quantiles, and U-statistics; methods of estimation: maximum likelihood estimates, method of moments, L-estimators, Bayes estimators; asymptotic efficiency; likelihood ratio tests, chi-square tests, asymptotic relative efficiencies of tests; weak convergence of the empirical distribution function to a Brownian bridge and application; selection of topics from the following: large deviations, second-order asymptotic efficiency, bootstrap rank tests.

MATH–M 671 Numerical Treatment of Differential and Integral Equations I (3 cr.) P: M540 or consent of instructor. Finite difference methods of ordinary and partial differential equations; relaxation methods; discrete kernel functions; methods of Ritz, Galerkin, and Trefftz approximate methods for integral equations.

MATH–M 672 Numerical Treatment of Differential and Integral Equations II (3 cr.) P: M540 or consent of instructor. Finite difference methods of ordinary and partial differential equations; relaxation methods; discrete kernel functions; methods of Ritz, Galerkin, and Trefftz approximate methods for integral equations.

MATH–M 680 Logic and Decidability (3 cr.) P: M584 and M404; or consent of instructor. Effective syntax and semantics of propositional and first-order logics, theory of decidability and some decidable theories, theory of undecidability and implicit definability, Gödel's theorems on incompleteness and the unprovability of consistency.

MATH–M 682 Model Theory (3 cr.) P: M583, M680, and M502; or consent of instructor. Elementary equivalence, completeness and model-completeness, interpolation, preservation and characterization theorems, elementary classes, types, saturated structures, introduction to categoricity and stability.

MATH–M 701 Selected Topics in Algebra I (3 cr.)

MATH–M 702 Selected Topics in Algebra II (3 cr.)

MATH–M 711 Selected Topics in Analysis I (3 cr.)

MATH–M 712 Selected Topics in Analysis II (3 cr.)

MATH–M 721 Selected Topics in Topology I (3 cr.)

MATH–M 722 Selected Topics in Topology II (3 cr.)

MATH–M 731 Selected Topics in Differential Geometry I (3 cr.)

MATH–M 732 Selected Topics in Differential Geometry II (3 cr.)

MATH–M 733 Selected Topics in Algebraic Geometry I (3 cr.)

MATH–M 734 Selected Topics in Algebraic Geometry II (3 cr.)

MATH–M 741 Selected Topics in Applied Mathematics I (3 cr.)

MATH–M 742 Selected Topics in Applied Mathematics II (3 cr.)

MATH–M 743 Selected Topics in Mathematical Physics I (3 cr.) Content varies from year to year. May be taught in alternate years by members of the Department of Physics; see PHYS P743.

MATH–M 744 Selected Topics in Mathematical Physics II (3 cr.) Content varies from year to year. May be taught in alternate years by members of the Department of Physics; see PHYS P743.

MATH–M 751 Selected Topics in Mechanics I (3 cr.)

MATH–M 752 Selected Topics in Mechanics II (3 cr.)

MATH–M 761 Selected Topics in Probability I (3 cr.)

MATH–M 762 Selected Topics in Probability II (3 cr.)

MATH–M 771 Selected Topics in Numerical Analysis I (3 cr.)

MATH–M 772 Selected Topics in Numerical Analysis II (3 cr.)

MATH–M 781 Selected Topics in Mathematical Logic (3 cr.)

MATH–M 782 Selected Topics in Mathematical Logic (3 cr.)

MATH–M 800 Mathematical Reading and Research (arr. cr.) **These courses are eligible for a deferred grade.

Medical Sciences

Departmental E-mail: msgrad@indiana.edu

Departmental URL: www.bloomington.medicine.iu.edu

Curriculum

Program Information

Each of the four basic medical sciences disciplines—anatomy, pathology, pharmacology, and physiology—administered by the Medical Sciences program of the School of Medicine on the Bloomington campus offers work leading to the M.S. and Ph.D. degrees.

The program also accepts medical students who wish to take advantage of small classes. The first two years of basic medical instruction include gross anatomy, microscopic anatomy, neuroanatomy, biochemistry, microbiology, physiology, emergency medicine, immunology, pharmacology, pathology, physical diagnosis, and introduction to medicine (the latter two taught at Bloomington Hospital). The curriculum is drawn from the many courses offered jointly through the School of Medicine and the University Graduate School. At a time when many medical schools are reducing their basic science offerings to medical students, the program at Bloomington should be of significant interest to those who seek a more rigorous training in the physical and biological sciences.

Complete information for the Doctor of Medicine program is provided in the School of Medicine Bulletin.

Anatomy and Cell Biology

(See also the Department of Anatomy, Indianapolis.)

Degrees Offered

Master of Science and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Applicants should have a bachelor's degree in the sciences or a substantial knowledge base in these disciplines. The Graduate Record Examination General Test is required. The Test of English as a Foreign Language (TOEFL) is required of international applicants.

Master of Science Degree

Course Requirements

A total of 30 credit hours, of which 20 credit hours must be in anatomy and cell biology or related courses other than research. A850 seminar must be taken each semester.

Thesis or other approved creative work

Required.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including courses in anatomy and cell biology, a basic course in both physiology and biochemistry, and dissertation. A minimum of 40 credit hours must be in courses other than research. A850 must be taken each semester.

Minors

Minors may be in a variety of disciplines subject to approval of the student's advisory committee.

Qualifying Examination

Written and oral, designed to test student's knowledge in anatomical sciences. Examination in the minor area may be required.

Final Examination

Oral defense of dissertation.

Other Provision

One year of supervised teaching experience is encouraged.

Pathology

See also the Department of Pathology, Indianapolis.

Degrees Offered

Master of Science and Doctor of Philosophy

Courses are offered on the Bloomington campus as part of the combined degree program in medicine and on the Indianapolis campus as part of the medical graduate curriculum. A student admitted to one program is also eligible for instruction in the other.

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

The degree Doctor of Medicine or good standing as a medical student. Non-majors in pathology admitted by special arrangement with the faculty.

Master of Science Degree

Course Requirements

A total of 30 credit hours, including 20 credit hours in pathology.

Thesis

Required.

Foreign Language

Reading knowledge of one foreign language desirable.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including dissertation and 30 credit hours in pathology or research in pathology.

Foreign Language/Research-Skill Requirement

One of three requirements: (1) reading proficiency in two languages, normally selected from French, German, and Russian; (2) proficiency in depth in one language, normally selected from the above languages; or (3) reading proficiency in one of the languages cited in (1), plus proficiency in biostatistics, biomedical instrumentation, or computer science.

Qualifying Examination

Written and oral.

Final Examination

Oral defense of dissertation.

Pharmacology

See also the Department of Pharmacology and Toxicology, Indianapolis.

Degrees Offered

Master of Science and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Applicants should have a bachelor's degree in the sciences or a substantial knowledge base in these disciplines. The Graduate Record Examination General Test is required. The Test of English as a Foreign Language (TOEFL) is required of international applicants.

Master of Science Degree

Course Requirements

A total of 30 credit hours, all of which must be taken in the program. At least 20 credit hours must be in courses other than research.

Thesis

Required.

Other Provision

One year of supervised teaching experience is encouraged.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including 40 credit hours in the program and dissertation.

Minor

Required.

Advisory Committee

To be composed of research advisor, the pharmacology faculty, and an individual from the minor discipline.

Grades

B (3.0) average required.

Qualifying Examination

Consists of two parts: (1) comprehensive written examination, and (2) written research proposal with oral presentation to the advisory committee.

Final Examination

Oral defense of dissertation.

Ph.D. Minor in Pharmacology

Students outside the department desiring to obtain a minor in pharmacology must take F605 and F606.

Other Provision

One year of supervised teaching experience is encouraged.

Physiology

See also the Department of Physiology and Biophysics, Indianapolis.

Degrees Offered

Master of Science and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Applicants should have a bachelor's degree in the sciences or a substantial knowledge base in these disciplines. The Graduate Record Examination General Test is required. The Test of English as a Foreign Language (TOEFL) is required of international applicants.

Master of Science Degree

Course Requirements

A total of 30 credit hours, including 12 credit hours in physiology. At least 20 credit hours must be in courses other than research.

Thesis

Required.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including dissertation, and the following courses: P513, P531, P532, M555, C580, and C583. P550 is to be taken each semester prior to admission to candidacy. Other course requirements will be determined by the student's advisory or research committee.

Foreign Language/Research Skill Requirement

Students must demonstrate proficiency in one of the following areas, as determined by the student's advisory

committee: a foreign language, statistics, or computer skills.

Qualifying Examination

Written and oral.

Final Examination

Oral defense of dissertation.

Other Provision

One year of supervised teaching required.

Ph.D. Minor in Physiology

Students outside the department desiring to obtain a minor in physiology are required to complete a minimum of 6 credit hours in physiology courses other than research.

Faculty

Assistant Dean/Director

John B. Watkins III*, Ph.D.

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Mark Braun (Pathology), Bruce J. Martin* (Physiology), Anthony L. Mescher* (Anatomy and Cell Biology), Kenneth Nephew* (Physiology), Roderick Suthers* (Physiology), Claire E. Walczak* (Biochemistry and Molecular Biology), John B. Watkins III* (Pharmacology)

Adjunct Professor

Robert De Voe* (Emeritus)

Associate Professors

David L. Daleke* (Biochemistry and Molecular Biology), John G. Foley* (Anatomy and Cell Biology), Valerie O'Loughlin (Anatomy and Cell Biology), Wayne Forrester (Medical Genetics)

Adjunct Associate Professor

Ann Carmichael* (History, History and Philosophy of Science)

Assistant Professor

Manjari Mazumdar (Biochemistry and Molecular Biology), Peter C. Hollenhorst (Biochemistry and Molecular Biology), Heather A. Hundley (Biochemistry and Molecular Biology), Richard G. Mynark* (Physiology), Martin C. Ronan (Physiology)

Courses

Anatomy and Cell Biology

MSCI–A 460 Anatomy of the Ear and Vocal Organs (3 cr.)

MSCI–A 464 Human Tissue Biology (4 cr.)

MSCI–A 505 Human Development (2 cr.) P: Z315 or equivalent and consent of instructor. Normal and abnormal human development. General considerations of development from embryonic through early neonatal period. Emphasis on understanding basis for morphological conditions found in the adult.

MSCI–A 512 Introduction to Research in Anatomy (1 cr.) Lectures and demonstrations in current research interests of faculty. Required of all new graduate students.

MSCI–A 513 Introduction to Research Techniques (1 cr.) P: A512. Individual work on a research problem. Required of all new graduate students.

MSCI–A 530 Special Topics (arr. cr.) P: Consent of instructor. **These courses are eligible for a deferred grade. Work in advanced areas in anatomy.

MSCI–A 550 Gross Human Anatomy I (4 cr.) P: Consent of instructor. Detailed study of the gross anatomy of the human, including a complete dissection. Systemic anatomy, anatomy of the thorax, abdomen, pelvis, and perineum (Sem. I). Anatomy of the head and neck, extremities (Sem. II).

MSCI–A 551 Gross Human Anatomy II (4 cr.) P: Consent of instructor. Detailed study of the gross anatomy of the human, including a complete dissection. Systemic anatomy, anatomy of the thorax, abdomen, pelvis, and perineum (Sem. I). Anatomy of the head and neck, extremities (Sem. II).

MSCI–A 560 Cell Biology and Histology (4 cr.) P: Consent of instructor. Detailed study of the microscopic anatomy of the human. Emphasis on structure-function relationships and laboratory identification of tissues and organs. Material presented at optical and electron microscopic level. Sem. I.

MSCI–A 566 Human Neuroanatomy (3 cr.) P: Consent of instructor. Basic human central nervous system will be covered. Interrelationships between structure and function in the nervous system. Thorough foundation for further study in neurophysiology, neuroanatomy, or neurology. Sem. II.

MSCI–A 601 Advanced Gross Anatomy I (4 cr.) P: A550-A551, consent of instructor. Structure of the upper and lower extremity. II. Thorax, abdomen, and pelvis. III. Head, neck, and gross brain. All include detailed dissection, lectures, and discussion on current literature to determine relation of structure to function.

MSCI–A 602 Advanced Gross Anatomy II (4 cr.) P: A550-A551, consent of instructor. Structure of the upper and lower extremity. II. Thorax, abdomen, and pelvis. III. Head, neck, and gross brain. All include detailed dissection, lectures, and discussion on current literature to determine relation of structure to function.

MSCI–A 603 Advanced Gross Anatomy III (4 cr.) P: A550-A551, consent of instructor. Structure of the upper and lower extremity. II. Thorax, abdomen, and pelvis. III. Head, neck, and gross brain. All include detailed dissection, lectures, and discussion on current literature to determine relation of structure to function.

MSCI–A 610 Comparative Neuroanatomy (2 cr.) P: Consent of instructor; graduate standing; one neuroscience course or equivalent. A comparison of the central nervous system of mammalian and nonmammalian

vertebrates, including a laboratory study of representative specimens.

MSCI–A 664 Selected Topics in Advanced Microscopic Anatomy (3 cr.) P: A560 or consent of instructor; graduate standing. Advanced instruction in the microscopic structure of selected animal cell systems, involving discussion and review of current literature and research dealing with these systems. Topics will change with each offering.

MSCI–A 800 Research in Anatomy (arr. cr.) **These courses are eligible for a deferred grade.

MSCI–A 850 Topical Seminar in Anatomy (1 cr.) Topics of current interest discussed in seminar format.

MSCI–A 878 Anatomy Teaching Practicum (2 cr.) This course is designed to provide the student with supervised teaching experiences in Gross Anatomy, Histology and Neuroscience, as well as critical Reviews of all teaching duties.

BIOL–L 500 Independent Study (arr. cr.) P: Must have written consent of faculty member supervising research.

MSCI–M 555 Medical Neuroscience (5 cr.) An interdisciplinary study of the morphological, functional, and clinical aspects of the human nervous system.

MSCI–M 570 Mechanisms of Human Disease (1–6 cr.) Intensive study of selected topics of human disease and pathological processes.

MSCI–M 620 Pedagogical Methods in the Health Sciences (3 cr.) This course is for biomedical sciences graduate students who want to be excellent instructors and classroom researchers. Students will learn about pedagogical methods, student learning styles ad methods of instructional delivery. Students also will learn about the scholarship of teaching and develop a foundation for implementing classroom research and assessment.

Pathology

MSCI–C 601 General Pathology (6 cr.) Principles of pathology, including a comprehensive introduction to mechanisms of reaction to injury and pathogenesis of disease processes.

MSCI–C 602 Systemic Pathology (6 cr.) Principles of pathology, including a comprehensive introduction to mechanisms of reaction to injury and pathogenesis of disease processes.

MSCI–C 800 Advanced Pathology (6 cr.) P: C603. Subject material and hours arranged to conform to needs of student.

MSCI–C 858 Experimental Pathology (5 cr.) Review and performance of selected experiments in pathology illustrating the types of pathologic processes.

MSCI–C 859 Research in Pathology (arr. cr.) **These courses are eligible for a deferred grade. Supervised initiation of a research project in pathology, and counseling in the completion of a thesis.

MSCI–C 862 Basic Pathologic Techniques (5 cr.) Methods of the histologic and chemical laboratories of pathology; principles of examination used in the usual procedures of surgical and autopsy pathology.

MSCI–C 875 Biochemical Pathology (5 cr.) P: C603 or B800. A survey of biochemical pathology as demonstrated by recent advances in research in pathology. Selected topics for lecture and discussion will include aspects of tissue, cellular, subcellular, and molecular pathology.

MSCI–M 575 Human Diseases (5 cr.) This course will explore and detail the basic elements of human disease. The fundamental pathology of all organ systems of the human body will be covered as will the basic elements of bodily response to a variety of forms of injury.

Pharmacology

MSCI–C 580 Medical Biochemistry (3 cr.) Biochemistry for medical students, emphasizing structure-function relationships of cellular components and biosynthesis and degradation of simple and complex cell constituents as well as regulation of metabolic pathways. Includes biochemical basis for genetic continuity and expression of hereditary characteristics. Sem I

MSCI–C 583 Physiological Biochemistry (3 cr.) P: C483. To develop a sound and rigorous biochemical background for students in medicine and allied health sciences. Biochemistry of physiological and pathological processes; role of heredity and environmental factors; effect on macromolecules, macromolecular aggregates, and cells. Sem II

MSCI–F 605 Principles of Pharmacology I (4 cr.) P: Chemistry C483, Medical Sciences P531-P532, or consent of instructor. Basic principles and clinical aspects of modern pharmacology presented in lectures. Physicochemical properties of drugs. Drugs that affect the autonomic nervous system. Drugs that act on cardiovascular and renal systems. Chemotherapy of cancer, infections, and parasites.

MSCI–F 606 Principles of Pharmacology II (4 cr.) P: F605. Drugs that influence the central nervous system. Drugs that influence gastrointestinal and endocrine systems. Immunopharmacology and the pharmacology of allergy and inflammation. Toxicology.

MSCI–F 611 Methods of Pharmacology I (3 cr.) P: Consent of instructor. Chemical and biological procedures used in pharmacological research. Lectures and demonstrations of techniques used for the determination of specific substances in biological material.

MSCI–F 612 Methods of Pharmacology II (3 cr.) P: F611. Laboratory application of principles and techniques presented in F611 to practical problems in pharmacological research. Introduction to data handling.

MSCI–F 613 Graduate Pharmacology I (3 cr.) P: F605-F606 or consent of instructor. Molecular mechanisms of drug action, drug-receptor interactions, drug metabolism, and pharmacokinetics.

MSCI–F 614 Graduate Pharmacology II (3 cr.) P: F613 or consent of instructor. Continuation of F613. Molecular mechanisms of drug action, drug-receptor interactions, drug metabolism and pharmacokinetics.

MSCI–F 615 Chemotherapeutic Pharmacology (3 cr.) P: F605-F606 or consent of instructor. Basic principles of use of drugs as selectively toxic agents and

of chemotherapy of bacterial, parasitic, or viral diseases and malignancies.

MSCI–F 616 Molecular Pharmacology (3 cr.) P: F605-F606 or consent of instructor. Molecular mechanisms as they relate to drug action. Biological transducers, receptor mechanisms, subcellular phenomena in the actions of drugs on mammalian systems.

MSCI–F 617 Pharmacology of Drug Metabolism (3 cr.) P: F605-F606 or consent of instructor. Physicochemical principles involved in the absorption, distribution, metabolism, and excretion of drugs and other foreign compounds in the mammalian organism.

MSCI–F 618 Pharmacokinetics (3 cr.) P: F617. Kinetic aspects of the absorption, distribution, and excretion of drugs in the mammalian organism. Compartmentalization, multiphasic decay curves, and computerized treatments.

MSCI–F 619 Endocrine Pharmacology (3 cr.) P: F605-F606 or consent of instructor. The pharmacology of hormones. Biosyntheses, structures, actions, and degradations of hormones endogenous to mammalian species. Structure and pharmacological activity of synthetic analogs and antagonists of naturally occurring hormones.

MSCI–F 620 Special Topics in Pharmacology (3 cr.) P: F605-F606 or consent of instructor. Special topics of current interest in pharmacology.

MSCI–F 621 Readings in Pharmacology (1–3 cr.) Supplementary readings and tutorial discussions in aspects of pharmacology to fit the needs of individual students or for specialized areas.

MSCI–F 625 Research in Pharmacology (arr. cr.) Original research as approved.

MSCI–F 630 Seminar in Pharmacology (1 cr.) Research reports by students, faculty, and invited guests.

Physiology

MSCI–P 416 Comparative Animal Physiology (3 cr.)

MSCI–P 417 Neurobiology (3 cr.)

MSCI–P 418 Laboratory in Comparative Animal Physiology (2 cr.)

MSCI–P 421 Biophysical Principles in Physiology (3–5 cr.)

MSCI–P 431 Human Physiology (4 cr.)

MSCI–P 509 Physiological Adaptations (3 cr.) Mechanisms of adaptation and acclimatization of invertebrate and vertebrate animals to environmental conditions. Seminar-type course.

MSCI–P 510 Control Systems Theory in Biology (4 cr.) P: Introduction to calculus; P531 or equivalent. Predicting the properties of physiological systems from the dynamic properties of their component parts. Laboratory emphasizes analog and digital simulation techniques.

MSCI–P 512 Introduction to Research in Physiology (1 cr.) Introduction to areas and methods of current faculty research. Required of all new graduate students.

MSCI–P 513 Introduction to Research Techniques (1 cr.) P: P512. Individual work on a research problem.

MSCI–P 530 Special Topics (arr. cr.) P: Consent of instructor. Work in advanced areas in physiology.

MSCI–P 531 Human Physiology I (3 cr.) Basic principles of homeostasis; muscle, cardiovascular, and renal physiology and metabolism relevant to humans. Sem I

MSCI–P 532 Human Physiology II (5 cr.) Basic physiological principles of temperature regulation, respiration, digestion, and endocrinology relevant to humans. Sem II

MSCI–P 541 Advanced Physiology I: Neurophysiology (3 cr.) P: P531, P532 or P417, or consent of instructor. From molecular to behavioral level, with special emphasis on electrophysiology and reflexes.

MSCI–P 543 Neurophysiology Seminar (3 cr.) P: P541. May be taken more than once with consent of the department for a maximum of 6 credits.

MSCI–P 547 Topical Seminar in Physiology (1–5 cr.) P: Graduate standing and consent of instructor. Discussion and review of current research and literature in physiology.

MSCI–P 548 Neuroethology (3 cr.) P: Consent of instructor. The function of nerve cells in controlling the natural behavior of animals. Sensory, integrative, and motor processes underlying selected behavior patterns of invertebrate and vertebrate animals.

MSCI–P 550 Seminar in Physiology (1 cr.) P: Graduate standing in physiology. Biomedical colloquium/seminar series on current topics of interest in medical sciences.

MSCI–P 551 Advanced Physiology II: Circulation (1 cr.) P: P531, P532, or P416 or equivalent or consent of instructor. Lecture and seminar discussions of current literature, with emphasis on physical models.

MSCI–P 561 Advanced Comparative Animal Physiology (3 cr.) P: P531, P416 or equivalent, or consent of instructor. Lectures and discussions of current literature on mechanisms and adaptations of respiration, temperature regulation, locomotion, and osmoregulation from a comparative approach. Topics will be covered in succeeding years on a rotating basis. May be taken more than once for different topics.

MSCI–P 575 Advanced Physiology: Exercise (3 cr.) Study of the regulation and integration of metabolic, cardiovascular, respiratory, endocrinological, and biochemical functions of the human body in response to exercise of all types and durations.

MSCI–P 576 Advanced Physiology: Work and Environmental (3 cr.) Mechanisms of contraction and neuromuscular control. Metabolic energy cost, efficiency and the fuels of work. Circulatory and respiratory adjustments and their regulation in exercise. The adjustments and regulation of chemical and thermal homeostasis. Effects of environmental factors, training, age, health, and disease on metabolic, cardiovascular, and respiratory adjustment to exercise. (Offered in School of Health, Physical Education, and Recreation.)

MSCI–P 620 Renal Physiology (3 cr.) P: P531, A464, P551, C483. Designed for graduate students in physiology. Covers recent advances in acid-base balance, blood pressure regulation, and salt balance in relation to endocrinology. Offered alternate years in second semester.

MSCI–P 800 Research in Physiology (arr. cr.) **These courses are eligible for a deferred grade.

MSCI–M 555 Medical Neuroscience (5 cr.) An interdisciplinary study of the morphological, functional, and clinical aspects of the human nervous system.

GRAD–G 800 Biophysics Seminar (1 cr.) Topics of current interest in biophysics.

Institute for Medieval Studies

College of Arts and Sciences
Departmental E-mail: mest@indiana.edu

Departmental URL: http://www.indiana.edu/~medieval/

Curriculum

Ph.D. Minor in Medieval Studies

Course Requirements

Four courses in Medieval Studies outside the student's major department. These courses must be from at least two different departments and must include one of the Medieval Studies courses listed below.

Grades

Courses in which a student receives less than a B (3.0) will not count toward the minor.

Examination

None.

Graduate Area Certificate in Medieval Studies

The Area Certificate in Medieval Studies is designed to allow doctoral students to investigate medieval civilization more extensively than in the Ph.D. minor program.

Course Requirements

Nine courses in the medieval period: four in the student's major department and five in other departments, two of which should be drawn from the group of courses listed below, with at least one course from Medieval Studies. Please note that the selection of courses not in the student's major department should be made in consultation with the director of the Institute before courses are presented for certification. Students in departments that do not provide the requisite four courses in medieval topics in their disciplines may, in consultation with the director of the Institute, design an alternative program.

In addition to courses offered by the Medieval Studies Institute, graduate courses in the medieval period are offered by eighteen departments across the College of Arts and Sciences, the Jacobs School of Music, and the School of Library and Information Science. Students should consult the Medieval Studies Web site (http://www.indiana.edu/~medieval/index.shtml) for a complete list of approved courses offered during each semester.

Language Requirements

Students must demonstrate advanced proficiency in one of the following languages: Classical Greek, Hebrew, Italian, Latin, Medieval Arabic, Medieval Japanese, Old English, Old French, Old Norse, Old Occitan, or Persian. Advanced proficiency can be established by presenting for credit two advanced courses in philology or literary studies of the language in question, or by appropriate advanced examination.

Grades

Courses in which a student receives less than a B (3.0) will not count toward the certificate.

Examination

None.

Faculty

Director

Professor Rosemarie McGerr*

Core Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

David Brakke* (Religious Studies), Jamsheed Choksy* (Central Eurasian Studies, History), Robert Fulk* (Chancellor's Professor, English), Kari Gade* (Germanic Studies), Wendy Gillespie (Early Music Institute), Olga Impey* (Spanish and Portuguese), Hildegard Keller* (Germanic Studies), Karma Lochrie* (English, Gender Studies), Thomas J. Mathiesen* (Distinguished Professor, Music), Rosemarie McGerr* (Comparative Literature), Jacques Merceron* (French and Italian), Emanuel Mickel * (French and Italian), Suzanne Stetkevych* (Near Eastern Languages and Cultures), H. Wayne Storey* (French and Italian), John Walbridge* (Near Eastern Languages and Cultures)

Associate Professors

Bridget K. Balint (Classical Studies), Sarah Bassett (Art History), Patricia Ingham* (English), Paul Losensky* (Central Eurasian Studies, Comparative Literature), Diane Reilly* (Art History), Leah Shopkow* (History)

Assistant Professors

Deborah Deliyannis* (History), Shannon Gayk (English)

Librarians

Joel Silver (Curator of Books, Lilly Library), Cherry Williams (Curator of Manuscripts, Lilly Library)

Affiliated Faculty

Professors

Asma Afsaruddin* (Near Eastern Languages and Cultures), Judith Anderson* (Chancellor's Professor, English), Christopher I. Beckwith* (Central Eurasian Studies), Lawrence Clopper* (Emeritus, English), Henry Cooper* (Slavic Languages and Literatures), Alfred David* (Emeritus, English), Paul Elliott (Early Music Institute), J. Albert Harrill* (Religious Studies), Mark

Kaplan* (Philosophy), Eugene Kleinbauer* (Emeritus, Art History), Eleanor Leach* (Ruth Halls Professor, Classical Studies), Consuelo Lopez-Morillas* (Emerita, Spanish and Portuguese), Fedwa Malti-Douglas* (Martha C. Kraft Professor of Humanities), William Newman* (Ruth Halls Professor, History and Philosophy of Science), Timothy W. O'Conner* (Philosophy), Samuel N. Rosenberg* (Emeritus, French and Italian), Kemal Silay* (Central Eurasian Studies), Paul Spade* (Philosophy)

Associate Professors

Christopher Atwood* (Central Eurasian Studies), Cynthia J. Bannon* (Classical Studies), Ann Carmichael* (History, History and Philosophy of Science), Arthur Field* (History), Constance Furey* (Religious Studies), Jeffrey Huntsman* (Emeritus, English), Kevin Jaques* (Religious Studies), Sheila Lindenbaum (Emerita, English), Massimo Scalabrini* (French and Italian), Elliot Sperling* (Central Eurasian Studies), Barbara Vance* (French and Italian), Edward Watts* (History)

Graduate Advisor

Professor Rosemarie McGerr*, Ballantine Hall 902, rmcgerr@indiana.edu, (812) 855-7627

Courses

MEST–M 500 Introduction to Medieval Studies (4 cr.) An introduction to issues and practices in the field with some attention to bibliographical tools.

MEST–M 502 Colloquium in Medieval Studies (4 cr.) Investigation of an interdisciplinary problem in medieval civilization, topic and disciplines to vary, or readings of foundational texts from the period.

MEST–M 525 Medieval Provencal (2–4 cr.) A variable topics course focusing on the language, literature, and documents regarding the use of the dialects of Old Occitan in France, Italy, and Spain during the Middle Ages. Taught in English with materials in the original language.

MEST–M 600 Medieval Manuscripts (4 cr.) Paleography, codicology, diplomatics; the study of manuscript production, history, and use.

MEST–M 650 Manuscript Cultures (3–4 cr.) Study of medieval and early modern manuscripts and primary historical documents and the evaluation of the cultural contexts of their production, reproduction and use.

MEST–M 700 Seminar in Medieval Studies (4 cr.) P: May be repeated for credit. Advanced research in specialized topics and problems in the field.

MEST–M 815 Readings in Medieval Civilization (1–4 cr.)

Cross-listed Courses

- L300 Intensive Introduction to Classical and Medieval Latin (3 cr.)
- L400 Intensive Study of Literary Latin (3 cr.)
- L409 Readings in Medieval Latin (3 cr.)
- L540 Medieval Latin (4 cr.)
- L611 Seminar in Latin Epigraphy or Palaeography (4 cr.)

Mythology Studies

College of Arts and Sciences

Departmental E-mail: myth@indiana.edu

Departmental URL: www.indiana.edu/~myth

Curriculum

Ph.D. Minor in Mythology Studies

Course Requirements

Students must complete 12 or more graduate credit hours of appropriate courses. All courses must be approved in advance by the mythology studies advisor.

At least one of the courses must be a core course, either Folklore F545 Folk Narrative (Topic: Analysis of Myth) or Folklore F545 Folk Narrative (Topic: Cosmology and Worldview) or Classical Studies C405 Comparative Mythology. Other courses taught by participating faculty may be designated by the mythology studies advisor as fulfilling the core requirement when they provide a theoretical and methodological overview of the study of mythology.

No more than two courses may be taken in a single department. No more than 3 credit hours of directed readings can be applied to the minor.

Grades

A minimum of B (3.0) in all courses that count toward the minor.

Examination

None.

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Director

Associate Professor Gregory Schrempp*

Interdepartmental Graduate Committee on Mythology Studies

Professors

Raymond DeMallie* (Anthropology), Hasan El-Shamy*(Folklore and Ethnomusicology), Robert Fulk* (English), Kari Gade* (Germanic Studies), David Haberman* (Religious Studies, India Studies), William Hansen* (Emeritus, Classical Studies, Folklore and Ethnomusicology), Robert Ivie* (Communication and Culture), Eleanor Winsor Leach* (Classical Studies), John McDowell* (Folklore and Ethnomusicology)

Associate Professors

Jeffrey Huntsman* (Emeritus, English), Gregory Schrempp* (Folklore and Ethnomusicology)

Associate Faculty

Associate Professors Cynthia Bannon* (Classical Studies), Stephanie Kane* (Criminal Justice)

Courses

CLAS–C 405 Comparative Mythology (4 cr.) P: C205, graduate standing, or consent of instructor. Advanced theoretical study of the forms and functions of classical Greek and Roman myths, including reading and evaluation of comparable myths in ancient Near Eastern cultures (Egypt, Mesopotamia, Anatolia, Canaan). Comparative reading and evaluation of selected myths from outside the Mediterranean cultural area.

Folklore

FOLK–F 545 Folk Narrative (3 cr.) (Topic: Analysis of Myth) Examination of myths, folktales, legends, jokes, fables, anecdotes, personal narratives, or other forms of folk narrative. Attention given to the content, form, and functions of the narratives as well as the variety of theories and methodologies employed in their study.

Music

Jacobs School of Music

Departmental E-mail: musgrad@indiana.edu
Departmental URL: http://www.music.indiana.edu/degrees/graduate/

Curriculum

Degrees Offered

Master of Arts, dual Master of Arts and Master of Library Science (jointly with the School of Library and Information Science), and Doctor of Philosophy.

In addition, the Jacobs School of Music offers the Master of Music, the Master of Science in Music, the Master of Music Education, the Master of Science in Music Education, the combined Master of Music and Master of Library Science (jointly with the School of Library and Information Science), Specialist in Music Education, the Doctor of Music, and the Doctor of Music Education degrees. For information regarding degrees offered exclusively or jointly by the Jacobs School of Music and the School of Library and Information Science, see their respective bulletins.

Special School Requirements

(See also general University Graduate School requirements.)

Admission

To work toward a degree in music through the University Graduate School, a student must first be admitted to the Jacobs School of Music; after satisfactorily completing one semester of course work, the student may apply for admission to the University Graduate School. The Graduate Record Examination General Test is required for admission. Entrance proficiency examinations are also required; for details see the “Graduate Division” section of the Jacobs School of Music Bulletin. Students must meet the general requirements of the University Graduate School and the specific requirements of the Jacobs School of Music outlined in its bulletin.

Grades

Current and cumulative grade point average of at least 3.0 (B).

Master of Arts Degree
Master of Arts in Musicology

Admission

Bachelor’s degree (B.M. or B.A.) with a major in music, or demonstrated equivalent. The applicant’s scores on the GRE General Test must be received from the Educational Testing Service in Princeton, New Jersey, by the application deadline. The applicant must submit a formal research paper on a historical or theoretical subject in music.

Proficiency Examinations

Examinations in music theory, music history, keyboard skills, and music performance.

Major

Eighteen (18) credit hours. 9 hours selected from M525 Survey of Operatic Literature (3 cr.), M527 Symphonic Literature (3 cr.), M528 Chamber Music Literature (3 cr.), M650 Music in the United States (3 cr.), M651 Medieval Music (3 cr.), M652 Renaissance Music (3 cr.), M653 Baroque Music (3 cr.), M654 Classic Music (3 cr.), M655 Romantic Music (3 cr.), M656 Music since 1900 (3 cr.), M502 Composers: Variable Topics (3 cr.) or M510 Topics in Music Literature (3 cr.); 6 hours selected from T551 Analytical Techniques for Tonal Music (3 cr.), T545 Introductory Analysis of Music Literature (3 cr.), T555 Schenkerian Analysis (3 cr.), or T556 Analysis of Music since 1900 (3 cr.); 3 hours selected from graduate courses in music history and literature, musicology, music theory, or ethnomusicology.

Music History and Literature Requirement

6 credit hours selected from M525 Survey of Operatic Literature (3 cr.), M527 Symphonic Literature (3 cr.), M528 Chamber Music Literature (3 cr.), M650 Music in the United States (3 cr.), M651 Medieval Music (3 cr.), M652 Renaissance Music (3 cr.), M653 Baroque Music (3 cr.), M654 Classic Music (3 cr.), M655 Romantic Music (3 cr.), M656 Music Since 1900 (3 cr.), M502 Composers: Variable Topics (3 cr.), or M510 Topics in Music Literature (3 cr.). Course topics cannot be repeated.

Outside Area

Six (6) credit hours in one field inside or outside music in which the student has the background to do graduate-level course work.

Tool-Subject Requirement

M539 Introduction to Music Bibliography (2 cr.).

Foreign Language Requirement

Reading knowledge of German as demonstrated by musicology department examination.

Ensemble

Required each semester of enrollment.

Master of Arts Examination

To be taken in the semester in which a student completes the course work for the degree. Students will also submit a portfolio of papers written for graduate courses in the department.

Dual Master of Arts and Master of Library Science Degrees

This program permits the student to coordinate a Master of Library Science degree with either a Master of Arts degree in musicology or a Master of Music in music theory.

Admission Requirement

In addition to the general requirements, the student must apply for admission to the Jacobs School of Music and simultaneously to the School of Library and Information Science and must meet admission criteria established by each.

Requirements

The student must satisfy the requirements for a Master of Arts degree in musicology or a Master of Music degree in music theory, and for a Master of Library Science degree.

The outside area for the Master of Arts or Master of Music degree is fulfilled by 6 credit hours in library science, which count towards both degrees.

Doctor of Philosophy Degree

Majors are available in:

Music Education

Prerequisite

Candidates must have a scholarly or teaching background that indicates potential for outstanding scholarship in the field of music education.

Admission

(1) GRE General Test scores (2) short video recording which demonstrates proficiency in teaching and performance or ensemble direction (3) interview with music education faculty (4) three- to five-page essay on applicant's background and goals in music education.

Proficiency Examinations

Examinations in music theory, music history, keyboard skills, music performance, and musical styles.

Major-Field Requirements

Foundation Courses (9 credit hours): E518 Foundations of Music Education (3 cr.), E530 Learning Processes in Music (3 cr.), E535 Measurement, Evaluation, and Guidance in Music (3 cr.) These courses may be validated based on prior work and credits replaced with dissertation credits or other graduate music courses.

Core Courses (12 credit hours): E616 Curriculum in Music Education (3 cr.), E618 History and Philosophy of Music Education (3 cr.), E619 Psychology of Music (3 cr.), E645 Music Teacher Education (3 cr.), E662 Public Lecture in Music Education (0 cr.)

Research courses (13 credit hours): E658 Seminar in Music Education (2 cr.); E650 Music Education Research Colloquium (0 cr.), required each semester of full-time enrollment; E631 Quantitative Research in Music Education (3 cr.); E640 Qualitative Research in Music Education (3 cr.); one of
E660 Philosophical Research in Music Education (2 cr.),
E661 Historical Research in Music Education (2 cr.); one of
E632 Advanced Quantitative Research in Music Education (3 cr.), an advanced qualitative research course outside music education, approved by the music education department, or
E665 Historical and Philosophical Readings in Music Education (3 cr.)

Specialization Area

6 credit hours of graduate music courses in one of the following areas with the approval of the chair or coordinator of graduate studies in music education.
An audition is required for wind conducting, choral conducting, and individual studio (performance/ composition) specialization areas.

1. **Wind Conducting and Literature**. G566-G567 Interpretation and Conducting of Band Literature I-II (3-3 cr.)
2. Choral Conducting and Methodology. E528 Advanced Choral Methods and Materials (3 cr.), G560 Graduate Choral Conducting (3 cr.)
3. **College Music Teaching**. E517 Sociology of Music (3 cr.), E635 College Music Teaching (3 cr.)
4. Instrumental Methodology. E527 Advanced Instrumental Methods (3 cr.), E568 Administration of Instrumental Groups (3 cr.)
5. **Jazz Methodology**. One of E581 Methods and Materials for Teaching Instrumental Jazz (3 cr.) or E582 Methods and Materials for Teaching Vocal Jazz (3 cr.); O521 Jazz Improvisation 1 (3 cr.)
6. **General Music Methodology**. One of E524 Exploratory Teaching in General Music K-12 (3 cr.) or E540 Topics in General Music (3 cr.); one of E521 The Children's Chorus (3 cr.), E522 Music in Early Childhood (3 cr.), or E571 Kodaly Concept I (3 cr.)
7. **String Methodology**. E646 Graduate Seminar in String Research (3 cr.); one of G590 String Orchestra Literature (3 cr.) or E580 Methods and Materials for Teaching String Music (3 cr.)
8. **Individual studio study (performance/ composition)**. 6 credits of 800-level individual study in a performance area or composition.

Electives

6 credits in graduate music courses. Students completing the individual studio study specialization area must include one graduate-level pedagogy or literature course in an appropriate performance area or (for students studying composition) G550 Conducting New Music.

Minor

12 credit hours within or outside the field of music in any subject for which the candidate has the necessary background for advanced coursework. The minor field must differ from the specialization area. Some departments may require a written and/or oral examination in the minor field.

Dissertation

E700 Dissertation in Music Education (2-11 cr.)

Foreign Language Requirement

Reading knowledge of two non-English languages as demonstrated by examination; or reading knowledge of one language and demonstration of proficiency in one research skill such as statistics or computer science, approved by the department and the director of graduate studies of the Jacobs School of Music.

Qualifying Examination

Written and oral examination.

Music Theory

Admission

Master's degree in music theory or musicology or the demonstrated equivalent. Students with outstanding credentials may apply directly from a bachelor's degree. Students are required to demonstrate competency in all areas required of the M.M. music theory major at Indiana University, and may be exempted from certain courses on the recommendation of the department. Applicants must apply to both the Graduate Division of the Jacobs School of Music and the University Graduate School. In addition to three letters of recommendation, applicants must submit two extensive, formal research papers or a master's thesis in music theory or musicology. An individual interview is also required; applicants are expected to be proficient in sight singing, aural skills, and keyboard harmony. The applicant's scores on the GRE General Test must be received from Educational Testing Service in Princeton, New Jersey, by the application deadline.

Proficiency Examinations

Examinations in music theory, music history, keyboard skills, music performance, and musical styles.

Major-Field Requirements

Foundation courses (15 credit hours): T551 Analytical Techniques for Tonal Music (3 cr.), T555 Schenkerian Analysis (3 cr.), T556 Analysis of Music Since 1900 (3 cr.), T565 Stylistic Counterpoint: Variable Topics (3 cr.), T591 Teaching of Music Theory (3 cr.). Foundation courses may be validated based on previous coursework.

Advanced courses: T623-T624 History of Music Theory I-II (3-3 cr.); T658 Seminar in Music Theory: Variable Topics (3-3-3-3 cr.); T550 Readings in Music Theory* (3 cr.); 3 credits chosen from T658 Seminar in Music Theory: Variable Topics (3 cr.), T561 Music Theory: Variable Topics (3 cr.), T619 Projects and Problems in Music Theory (3 cr.), or another graduate course approved by the music theory department.

*Students who have already fulfilled the requirement for T550 must substitute 3 credits of T658, T561, T619, or another approved graduate course.

Minors

24 credit hours. Student must elect two minor fields, usually for 12 credit hours each. The first minor must be either music history and literature or musicology. The second minor may be inside or outside the Jacobs School of Music. For the second minor, the student may also select guided electives not in the major field, approved by the student's advisory committee and the director of graduate studies.

Public Lecture

T659 Public Lecture (0 cr.). The public lecture must be completed before taking the oral qualifying examination.

Dissertation

T700 Dissertation in Music Theory (9-24 cr.).

Tool-Subject Requirement

M539 Introduction to Music Bibliography (2 cr.). With a grade of B or higher.

Foreign Language Requirement

Reading knowledge of two non-English languages as demonstrated by examination or by grades of B or higher in two semesters of reading courses at the graduate level in each; or reading knowledge of one language and demonstration of proficiency in one research skill, approved by the department and the director of graduate studies of the Jacobs School of Music.

Qualifying Examination

Written and oral examination.

Musicology

Admission

Applicants for the Ph.D. in musicology must demonstrate strong preparation in music history. Students with outstanding credentials may apply directly from a bachelor's degree; students holding an M.A. or M.M. in musicology may be exempted from certain courses on the recommendation of the department. A formal research paper must be submitted with the application. The applicant's scores on the GRE General Test must be received from the Educational Testing Service in Princeton, New Jersey, by the application deadline.

Proficiency Examinations

Examinations in music theory, music history, keyboard skills, music performance, and musical styles.

Major-Field Requirements

45 credits including M551 Introduction to Historical Musicology (3 cr.), M602 Seminarin Musicology (3-3-3-3-3-3-3-3 cr.), M603 Methods of Musical Scholarship (3-3 cr.); 12 credit hours of courses in musicology, music theory, ethnomusicology, or other musical subjects approved by the student's doctoral advisory committee.

Minor

One minor, which may be inside or outside of music.

Dissertation

M700 Dissertation in Musicology (3-33 cr.).

Tool-Subject Requirement

M539 Introduction to Music Bibliography (2 cr.).

Foreign Language Requirement

Reading knowledge of two non-English languages as demonstrated by musicology department examination. The first must be German, French, Italian, Latin, Spanish, or Russian; the second should be relevant to the student's research area.

Qualifying Examination

Written and oral examination focusing on areas chosen by the candidate in consultation with his or her advisory committee.

Progress toward Degree

Deficiencies in music history or music theory, as determined by the graduate entrance examinations, must be met by the end of the first year. One language examination must be passed by the end of the first year, a second before the qualifying examination. The qualifying examination should ordinarily be taken in the fall of the fourth year. A dissertation proposal should ordinarily be submitted during the fourth year. Exceptions to this general schedule require the permission of the department.

Ph.D. Minors for Students Outside the Jacobs School of Music

Minors in music for doctoral students outside the Jacobs School of Music may be taken within one of the established departments of the Jacobs School of Music or as an individualized minor taken in more than one area. No general entrance examinations are required, but the director of graduate studies may require entering proficiency examinations. Acceptance as a minor, prerequisites, and minimum requirements are established by the director of graduate studies. No transfer credits will be accepted toward a music minor.

Faculty

Dean

Gwyn Richards

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Executive Associate Dean

Eugene O'Brien

Associate Dean of Instruction

Mary Wennerstrom*

Distinguished Professors

David Baker Jr., J. Peter Burkholder*, Thomas J. Mathiesen*, Susann McDonald, Timothy R. Noble, Menahem Pressler, Janos Starker, Violette Verdy

Professors

Atar Arad, Edward Auer, Ik-Hwan Bae, Claude Baker Jr., Edmund Battersby, Alan Bennett, Ernesto Bitetti, Myron Bloom, Evelyne Brancart, Bruce Bransby, James Campbell, Jacques Cesbron, Arnaldo Cohen, Edmund Cord, Costanza Cuccaro, Alan De Veritch, David Dzubay, Eli Eban, Luba Edlina-Dubinsky, David Effron, Peter E. Ellefson, Paul M. Elliott, Arthur Fagen, Janette Fishell, Jorja Fleezanis, Don Freund, Mauricio Fuks, Glenn Gass, Wendy Gillespie, Jean-Louis Haguenauer, Patrick Harbison, Robert J. Harrison, Mary Ann Hart, Jeffrey Hass, Robert S. Hatten*, C. David Higgins, Stephen Houghton, Lawrence P. Hurst, Estelle Jorgensen*, Mark Kaplan, Alexander Kerr, Marianne Kielian-Gilbert*, Paul Kiesgen, Eric Kim, Howard Klug, Henryk Kowalski, Teresa Kubiak, Jaime Laredo, Carl Lenthe, Vincent Liotta, William Ludwig, Kathryn Lukas, Patrice Madura*, Kevork Mardirossian, Michael McCraw, Daniel R. Melamed*, Carlos Montane, Shigeo Neriki, Nigel North, Eugene O'Brien, Daniel Perantoni, Andreas Poulimenos, Stephen Pratt, Gwyn Richards, Stanley Ritchie, Sharon Robinson, John D. Rommel, Michael Schwartzkopf*, Richard M. Seraphinoff, Karen Shaw, Marietta Simpson, M. Dee Stewart, Konrad A. Strauss, Linda Strommen, John Tafoya, Carmen Tellez, Carol Vaness, Michael Vernon, Andre Watts, Mary H. Wennerstrom*, Patricia Wise, David Woodley, Elisabeth B. Wright, Christopher Young, Mimi H. Zweig

Associate Professors

Frederico Agostini, Gary Arvin, Kevin Bobo, Brenda Brenner*, Virginia Cesbron, Emilio W. Colon, Brent Gault*, Jeffrey Gershman, Luke Gillespie, Halina Goldberg*, Julian L. Hook*, Gretchen G. Horlacher*, Brian L. Horne, Eric Isaacson*, Roman Ivanovitch*, Lissa Fleming May*, Kathleen McLean, Otis Murphy, Kristina Muxfeldt*, Emile Naoumoff, Jeffrey Nelsen, Massimo M. Ossi*, P. Q. Phan, Gary Potter*, Thomas Robertello, Frank Samarotto*, Patricia Stiles, Katherine Strand*, Elzbieta Szmyt, Joey Tartell, Thomas P. Walsh

Assistant Professors

Kyle Adams*, Jeremy Allen, David Cartledge, Phil Ford*, John G. Gibson, William Gray, Blair Johnston*, Ayana Smith*, Brent Wallarab, Giovanni Zanovello*

Director of Graduate Studies

Associate Professor Eric Isaacson*, Merrill Hall 011, (812) 855-1738

Courses

For a list of courses and their descriptions, see the Jacobs School of Music Bulletin.

Near Eastern Languages and Cultures

College of Arts and Sciences

Departmental E-mail: nelc@indiana.edu

Departmental URL: http://www.indiana.edu/~nelc/

Curriculum

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

International applicants (non-U.S. citizens, non green–card holders) are required to submit TOEFL scores only. U.S. applicants (U.S. citizens or green–card holders) are required to submit GRE scores only.

Exceptions:

1. International applicants who have their bachelor's degree from an American institution in the U.S. should normally submit GRE scores only. Consult the director of graduate studies or chair.
2. U.S. citizens who have been educated abroad (e.g., dual nationals from the Arab world) and have their bachelor's degree from non-U.S., non–English language institutions, should normally submit TOEFL scores only. Consult the director of graduate studies or chair.

Master of Arts in Near Eastern Languages and Cultures (NELC)

Course Requirements

A minimum of 36 credit hours of graduate work, including a minimum of 6 credit hours of History of the Middle East, 3 credit hours of a methodology/theory course, and 12 credit hours of advanced training (equivalent to 4th year proficiency) in a Middle Eastern language (a second language is strongly recommended for students intending to pursue also a Ph.D.). Each student's specific course plan must be approved in advance by the student's faculty advisors and the Director of Graduate Studies.

Examinations

Each student must successfully pass comprehensive written M.A. examinations. The exams will include two 2-hour exams covering the student's general knowledge of the Middle East and the students' major language. Each student must also submit a written paper in English, demonstrating a clear understanding of the chosen topic, the ability to conceive and carry out an original, scholarly project using primary and secondary texts in the original language, an advanced level of critical or theoretical insight, and competence in the use of research and bibliographic tools.

Students must notify the Director of Graduate Studies of their intention to take the M.A. examinations before the end of the preceding semester. The examining committee will be composed of a minimum of two faculty members. Students who fail an exam may be offered one opportunity to re-take it. Those who do not successfully pass the exams by the end of their sixth semester may be placed on probation and subsequently dismissed from the program for lack of progress as described in the "Academic Regulations" section of the Bulletin.

Doctor of Philosophy Degree in Near Eastern Languages and Cultures (NELC)

Admission Requirements

The Graduate Record Examination General Test (GRE) is required for domestic applicants. International students are required to submit their TOEFL scores. Students should hold an M.A. for admission to the Ph.D. program. Students holding an M.A. from another institution should include a writing sample as part of their application for admission. Students with an M.A. from the Indiana University Department of Near Eastern Languages and Cultures (NELC) will be asked to submit a statement of their Ph.D. plans as part of their admission dossier to the Ph.D. program. Successful completion of the NELC M.A. does not guarantee admission to the NELC Ph.D. program.

Course Requirements

A minimum of 75 credit hours of graduate work (including credits earned for the M.A.), plus dissertation. The students' courses must be approved by the Ph.D. advisor and the Director of Graduate Studies.

Language Requirements

Three languages are required for the NELC Ph.D.:

1. The major NELC language (normally Arabic, Hebrew, Persian, or Turkish): a minimum of 12 credit hours beyond the 18 required for the M.A. for continuing students or above the third-year level for incoming students, in courses approved by the director of graduate studies.
2. The minor NELC language (normally, Arabic, Hebrew, Persian, or Turkish): minimum of 6 credit hours at the third-year level or above in courses approved by the Director of Graduate Studies. Biblical and Modern Hebrew at the elementary and intermediate levels can be combined to satisfy the third-year level requirement with the approval of the director of graduate studies.
3. A European research language (normally, French, German or Spanish), tested according to the graduate school's rules.

The choice of languages must be pertinent to the student's graduate curriculum and approved by the Director of Graduate Studies. Other languages may be substituted where deemed appropriate by the Director of Graduate Studies.

Outside Minor

Students are required to minor in an outside department or program. Students must fulfill the relevant department's rules for outside minors.

Qualifying Examination

Students will be examined on one major and two minor NELC fields. The three fields should be approved by the Director of Graduate Studies. Written examinations will be given by at least two professors, the major field lasting for three hours, and the minor field exams for two hours each. Upon successful completion of the written examinations, a student will take the oral examination within four weeks of the written examination. These examinations may be retaken once in whole or in part at the discretion of the examination committee.

Final Examination

Oral defense of the dissertation.

Ph.D. Minor in Near Eastern Languages and Cultures

Students from other departments are welcome to minor in Near Eastern Languages and Cultures as part of their doctoral program. To do so, they are required to take at least 12 credit hours of graduate-level course work, to be approved by the Director of Graduate Studies so as to form a coherent program. Students must maintain a 3.0 grade point average for the minor as a whole. Up to 12 credit hours may be transferred from other institutions

toward the NELC outside Ph.D. minor, but at least 6 credit hours must be completed in the IU NELC department.

Termination of Enrollment in the Doctoral Program

If a doctoral student fails the written qualifying examinations twice, fails the oral qualifying exam twice, falls below a 3.5 average, or fails to complete the written and oral examinations by the end of the approved length of time, the director of graduate studies, in consultation with the research committee, can initiate steps to terminate the student's enrollment in the program.

Faculty

Chairperson
Professor M. Nazif Shahrani*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Core Faculty

Professors

Asma Afsaruddin*, Salman H. Al-Ani*, Salih Altoma* (Emeritus), Hasan El-Shamy* (Folklore and Ethnomusicology), Stephen Katz*, M. Nazif Shahrani*, Suzanne Pinckney Stetkevych*, John Walbridge*

Associate Professor

Stephen Vinson*

Assistant Professors

Kevin W. Martin, Sara Scalenghe, Abdulkader Sinno

Senior Lecturer

Cigdem Balim Harding*

Lecturer

Zaineb Istrabadi

Adjunct Professors

Henry Glassie* (Emeritus, Folklore and Ethnomusicology), Thomas Mathiesen* (Jacobs School of Music)

Adjunct Associate Professors

Jane Goodman* (Communication and Culture), Matthias Lehmann* (History), Paul Losensky* (Central Eurasian Studies, Comparative Literature), Herbert Marks* (Comparative Literature)

Adjunct Assistant Professors

Sonya Atalay (Anthropology), Hakki Erdem Cipa (Central Eurasian Studies), David McDonald (Folklore and Ethnomusicology)

Affiliated Professors

Devin DeWeese* (Central Eurasian Studies), Karen Rasler* (Political Science), Ruth Stone* (Folklore and Ethnomusicology)

Affiliated Associate Professors

John Hanson* (History), R. Kevin Jaques* (Religious Studies)

Affiliated Assistant Professor

Christiane Gruber (Art History)

Director of Graduate Studies

Cigdem Balim Harding*, Goodbody Hall 102, (812) 855-9483

Courses

Arabic Language and Literature

NELC–A 500 Elementary Arabic I (2 cr.) This course is an introduction to Modern Standard Arabic as it is used in contemporary literature, newspapers, and radio. The course will focus on grammar, reading, dictation, composition, penmanship, conversation, and translation.

NELC–A 550 Elementary Arabic II (2 cr.) This course is an introduction to Modern Standard Arabic as it is used in contemporary literature, newspapers, and radio. The course will focus on grammar, reading, dictation, composition, penmanship, conversation, and translation.

NELC–A 501 Accelerated Arabic I (4 cr.) This is a beginners' level Modern Standard Arabic course especially designed for graduate students in order to enable them to acquire the necessary structures and important vocabulary for reading and writing purposes in the language. Homework load is highly substantial and a vital part of the success in the course. Students are expected to study between 3-4 hours daily on their own.

NELC–A 551 Accelerated Arabic II (4 cr.) This is a beginners' level Modern Standard Arabic course especially designed for graduate students in order to enable them to acquire the necessary structures and important vocabulary for reading and writing purposes in the language. Homework load is highly substantial and a vital part of the success in the course. Students are expected to study between 3-4 hours daily on their own.

NELC–A 560 First Year Arabic (3 cr.) For students with prior knowledge of Arabic who have not passed elementary level in the placement test. The course covers the grammar and vocabulary of A500 and A550 in one semester. Homework load is substantial. Grading is based on both continuous and summative assessment.

NELC–A 600 Intermediate Arabic I (3 cr.) P: A500-A550. This course emphasizes grammar, reading, composition, conversation, and translation using materials from medieval classical and modern literary Arabic.

NELC–A 610 Arabic Dialects I (3 cr.) P: A150/A550 or N182. This course will focus on a particular regional dialect (Egyptian, Iraqi, North African) teaching the students to speak every-day language.

NELC–A 650 Intermediate Arabic II (3 cr.) P: A500-A550. This course emphasizes grammar, reading, composition, conversation, and translation using materials from medieval classical and modern literary Arabic.

NELC–A 660 Advanced Arabic I (3 cr.) P: A500-A550. This course focuses on the continued development of speaking, listening, reading, and writing skills in Modern Standard Arabic. Materials drawn from classical prose will be introduced for study.

NELC–A 670 Advanced Arabic II (3 cr.) P: A500-A550. This course focuses on the continued development of

speaking, listening, reading, and writing skills in Modern Standard Arabic. Materials drawn from classical prose will be introduced for study.

NELC–A 680 Advanced Arabic III (3 cr.) P: Open to students with B or higher from A670. This course follows from Advanced Arabic II, which is already offered. It meets jointly with Fourth Year Arabic I (UG). A400 is a language course using four language skills and based on reading authentic materials in Modern Standard Arabic. The aim is to bring students to 'near native' levels of proficiency as much as possible.

NELC–A 690 Advanced Arabic IV (3 cr.) This is a four language skills Modern Standard Arabic course. The course aims for very high level proficiency in stylistic differences and usage in Modern Standard Arabic. It is based on reading authentic Arabic texts on different topics, discussing them in Arabic in the class, and writing about the discussed topics. Culture teaching is an integral part of the course.

NELC–A 620 Arabic Dialects II (3 cr.) P: NELC A610. Language course which focuses on a particular regional dialect (Egyptian, Iraqi, North African) and teaches students to speak the everyday language.

NELC–A 698 Teaching Arabic as a Foreign Language I (1 cr.) Helps students develop and practice skills and techniques for teaching Arabic as a foreign/second language to adults.

NELC–A 699 Teaching Arabic as a Foreign Language II (1 cr.) Helps students develop and practice skills and techniques for teaching Arabic as a foreign/second language to adults.

NELC–N 502 Qur'anic Arabic I (3 cr.) Introduces the specialized language of the Qur'an, its vocabulary and grammar. Covers related materials such as Qur'anic commentary, history, and Hadith. Teaches students to read classical and Qur'anic Arabic through a foundation in syntax and morphology.

NELC–N 510 Arabic Composition I (3 cr.) P: Consent of instructor. This course is designed to focus on instruction and practice in writing and reading Arabic. It is intended to develop skills in writing correct Arabic sentences, paragraphs, and themes related to a variety of subjects.

NELC–N 512 Classical Arabic Grammar (3 cr.) P: Consent of instructor. This course provides a systematic treatment (in Arabic) of the principal features of classical Arabic grammar. The technical Arabic terms and the concepts associated with them will be introduced, analyzed, and illustrated.

NELC–N 523 Conversational Arabic I (3 cr.) Formal spoken or "polite" Arabic, with attention to divergences in Arabic dialects.

NELC–N 524 Introduction to Arabic Linguistics (3 cr.) Concise history and description of the structure of Arabic. Special emphasis on the written and selected spoken varieties of modern Arabic, phonology, grammar, and basic vocabulary.

NELC–N 529 Arabic Phonetics and Phonology (3 cr.) This course presents a systematic study of Arabic phonetics and phonology utilizing scientific phonetics, both practical and theoretical, and the phonological processes of generative phonological theory.

NELC–N 555 Multimedia Arabic (3 cr.) Modern literary Arabic as found in printed and non-printed contemporary media. Materials selected from leading newspapers and magazines from the Arab world covering a variety of current political and cultural topics. Documentaries and live and taped television newscasts will also be utilized.

NELC–N 552 Qur'anic Arabic II (3 cr.) Introduces the specialized language of the Qur'an, its vocabulary and grammar. Covers related materials such as Qur'anic commentary, history, and Hadith. Teaches students to read classical and Qur'anic Arabic through a foundation in syntax and morphology.

NELC–N 560 Directed Readings in Arabic (1–6 cr.) In this course students will read and analyze Arabic or translated texts that are selected in accordance with the student's level and interests.

NELC–N 598 Individual Readings in Arabic Language and Linguistics (1–6 cr.) Analysis of materials in the fields of Arabic language and linguistics. Students may register to research certain aspects of these fields that are not covered by the regular sequence of Near Eastern Languages and Cultures courses.

NELC–N 690 Research in Classical Arabic Texts (1–6 cr.) This course provides intensive training in classical Arabic. Emphasis is placed on the accurate reading and translation of classical texts, their grammatical and stylistic features, and the use of modern and classical lexical. The course also includes a survey of relevant bibliographic and secondary sources. Variable topic.

NELC–N 701 Topics in Arabic Literature (2–3 cr.) Examination of translated Arabic literature of the Middle East and North Africa, as well as relevant modern Western works. All works read in English.

NELC–N 707 Seminar in Classical Arabic Literature (3–4 cr.) P: Ability to read classical Arabic texts. Intensive study of selected literary movements, periods, or genres. Individual research papers required.

NELC–N 709 Seminar in Modern Arabic Literature (3–4 cr.)

Hebrew Language and Literature

NELC–H 500 Elementary Hebrew I (2 cr.) Introduction to Hebrew as it is used in conversation, radio, press, and popular literature. Emphasis is given to phonetic and structural drills, grammar, reading, writing, and composition.

NELC–H 550 Elementary Hebrew II (2 cr.) Introduction to Hebrew as it is used in conversation, radio, press, and popular literature. Emphasis is given to phonetic and structural drills, grammar, reading, writing, and composition.

NELC–H 575 Introductory Readings in Hebrew Literature (3 cr.) Introductory survey, in Hebrew, of selected readings—poetry and prose—of the leading writers in Modern Hebrew Literature. Emphasis on familiarization and mastery of varying styles, forms and themes of Hebrew literature to serve as bridge to fluency and further study on advanced levels.

NELC–H 590 Intensive Elementary Hebrew (4 cr.) An intensive course in elementary Modern Hebrew, combining ulpan with standard language instruction techniques. The course covers an equivalent of one full year of elementary Hebrew in one term, and is open to those desiring to acquire all facets of language communication, morphology, phonology, and syntax.

NELC–H 600 Intermediate Hebrew I (3 cr.) P: H500-H550 or equivalent. Continuation of H500-H550. The course is designed to enable students to add classical and medieval Hebrew at a later stage.

NELC–H 650 Intermediate Hebrew II (3 cr.) P: H500-H550 or equivalent. Continuation of H500-H550. The course is designed to enable students to add classical and medieval Hebrew at a later stage.

NELC–H 670 Advanced Hebrew I (3 cr.) P: H600-H650 or other sufficient preparation. The course focuses on the completion of grammar and introduction to literature of all ages (biblical, midrashic, medieval, and modern), including grammar, style, vocabulary, technical terms, and literary forms.

NELC–H 680 Advanced Hebrew II (3 cr.) P: H600-H650 or other sufficient preparation. The course focuses on the completion of grammar and introduction to literature of all ages (biblical, midrashic, medieval, and modern), including grammar, style, vocabulary, technical terms, and literary forms.

NELC–N 471 Biblical Hebrew I (3 cr.) This course is an accelerated introduction to Biblical Hebrew. Emphasis is placed on grammar, morphology and syntax.

NELC–N 472 Biblical Hebrew II (3 cr.) This course is an accelerated introduction to Biblical Hebrew. Emphasis is placed on grammar, morphology and syntax.

NELC–N 473 Biblical Hebrew III (3 cr.) In this course students will study various genres of biblical writings through a careful examination of such passages in the original language.

NELC–N 517 Biblical Hebrew IV (3 cr.) In this course students will study various genres of biblical writings through a careful examination of such passages in the original language.

NELC–N 587 Modern Hebrew Literature in English (3 cr.) No knowledge of Hebrew necessary. Nineteenth- and twentieth-century fiction, poetry, and essays under such headings as assimilation (ideal or aberration?); ghetto and world; secularlism versus tradition; ethnicity, land, and universalism; nation, religion, state; utopias and revolutions; nostalgia, self-hate, rejuvenation; portrayal of anti-Semitism in literature. Readings and lectures in English.

NELC–N 588 Recent Hebrew Literature in English (3 cr.) No knowledge of Hebrew necessary. Fiction, poetry, and essays, with relevance to contemporary issues, such as the past (burden or asset?); the meeting of Europe and Near East; the kibbutz; ideal and reality; Jews, Arabs, Canaanites; diaspora and center; the personal and the collective; inwardness or realism; wars, holocausts, peace. Readings and lectures in English.

NELC–N 591 Directed Readings in Hebrew (1–6 cr.) In this course students will read and analyze Hebrew or translated texts that are selected in accordance with the student's level and interests.

NELC–N 675 The Kibbutz in Fact and Fiction (3 cr.) A survey of the representation of kibbutz ideology and community in Hebrew fiction and anthropological and sociological studies. Compares early representations of the kibbutz with its recent transformations to acquaint students with the impact of this unique social system in Israeli society and culture.

NELC–N 687 Modern Hebrew Literature in Hebrew (3 cr.) P: grade of C or better in any Hebrew course above H680 (such as N695, when taught in Hebrew), or equivalent. A survey of nineteenth- and twentieth-century fiction, poetry, essays in the original Hebrew under such headings as universalism, assimilation, ghetto and world; secularism versus tradition; ethnicity and land nation, religion, state; utopia and revolutions; nostalgia, self-hate, rejuvenation; portrayal of anti-Semitism in literature. Readings, assignments, and discussion in Hebrew.

NELC–N 691 Research in Medieval Hebrew Texts (3 cr.) This course provides intensive training in the use of medieval Hebrew as a research tool. Emphasis will be placed on the accurate reading and translating of medieval texts, on grammatical and stylistic characteristics of the texts, and on the use of appropriate lexical. Variable topic.

NELC–N 708 Seminar in Judaic Literature (3 cr.) P: Consent of instructor. This course emphasizes the study of selected representative literary works of classical, medieval, and modern periods; original texts or translation.

Persian Language and Literature

NELC–P 500 Elementary Persian I (2 cr.) Covers the basic grammar of modern Persian, along with conversation, composition, reading, and translating from selected materials dealing with Iranian civilization.

NELC–P 550 Elementary Persian II (2 cr.) Covers the basic grammar of modern Persian, along with conversation, composition, reading, and translating from selected materials dealing with Iranian civilization.

NELC–P 600 Intermediate Persian I (3 cr.) Continuation of the elementary Persian level. Review of grammatical structures and vocabulary, reading, and translating short literary and expository texts.

NELC–P 650 Intermediate Persian II (3 cr.) Continuation of the elementary Persian level. Review of grammatical structures and vocabulary, reading, and translating short literary and expository texts.

NELC–P 565 Introduction to Persian Literature in English (3 cr.) Covers development of Persian literature from its earliest stages in the tenth century A.D. to the present. Although the course covers a period of some 1,000 years, it does so in a way that seeks to provide background information for graduate students who may have an interest in Persian literature.

NELC–N 592 Directed Readings in Persian (1–6 cr.) Readings in Persian or translated texts selected in accordance with the student's level and interests.

NELC–N 685 Persian Mystical Literature in Translation (3 cr.) Examines the Persian literature of Islamic mysticism in English translation. Following an introduction

to the history and doctrines of Sufism, the class will turn to detailed readings and discussions of works in several prose and poetic genres: hagiography, biography, allegorical epic, mystical lyric, and Gnostic meditation.

NELC–N 692 Research in Classical Persian Texts (3 cr.) P: P550 or reading knowledge of Persian. Intensive training in classical Persian. Emphasis on the accurate reading and translation of classical texts, their grammatical and stylistic features, and the use of modern and classical lexica. Survey of relevant bibliographic and secondary sources.

Other Iranian Languages

NELC–P 660 Middle Iranian Languages (3 cr.) This course provides an introduction to the alphabets, grammar, vocabulary, and texts of various Iranian languages. It emphasizes reading, transcription, and translation. Religious, commercial, and political documents are examined.

Other Islamic Languages

NELC–K 500 Introduction to Kurdish I (2 cr.) Basic communication skills in Kurdish taught using the Kurmanji Kurdish dialect. Functional knowledge of sentence structures and vocabulary.

NELC–K 550 Introduction to Kurdish II (2 cr.) P: K100 or equivalent proficiency. A continuation of K500. Familiarity with the grammar of Kurmanji Kurdish will be strengthened through readings, conversation, and an introduction to Kurdish music, literature, and popular culture.

NELC–K 600 Intermediate Kurdish I (3 cr.) A continuation of the basic skills taught in the K500-K550 courses with the aim of expanding vocabulary and functional grammatical knowledge.

NELC–K 650 Intermediate Kurdish II (3 cr.) Building upon the foundational skills developed in previous semesters, students will continue to solidify their command of vocabulary and their knowledge of grammar.

NELC–U 500 Elementary Urdu I (2 cr.) An introduction to Urdu, the most important literary language of Islamic India and the national language of modern Pakistan. Designed for students with no previous knowledge of the language. Begins with the alphabet, then moves gradually to develop various language skills: reading, writing, and speaking.

NELC–U 550 Elementary Urdu II (2 cr.) P: U500 or consent of instructor. Continues skills developed in U500.

General

NELC–N 511 Foreign Study in Near Eastern Languages and Cultures (2–8 cr.) **These courses are eligible for a deferred grade.

NELC–N 545 Introduction to the Ancient Near East (3 cr.) Introduces ancient Near Eastern cultures from early farmers around 8000 B.C. to the Iron-Age kingdom of the Babylonians, Assyrians, and Iranians. Places emphasis on agriculture, literacy, stateformation, sociopolitical and religious institutions; legal and economic developments. Archaeological and textual information will be utilized in conjunction with visual aids.

NELC–N 565 Introduction to Islamic Civilization (3 cr.) Covers basics of Islamic religion and literature in historical context. Topics include the life of Mohammad, Qur'anic and other teachings of Islam, conquests and caliphates, early successor states, law, sects, theology, philosophy, and the relationship between the state and religion.

NELC–N 570 Qur'anic Studies (3 cr.) The Qur'an in its historical role as the Islamic revelation. Particular attention will be paid to its formation and compilation, the structural and stylistic characteristics of the text, and its role and function in Islam as well as the different schools of interpretation throughout history, and comparative studies between the Qur'an and the Judeo-Christian scriptures.

NELC–N 597 Peoples and Cultures of the Middle East (3 cr.) General anthropological introduction to social institutions and cultural forms of the Arab countries of North Africa and the Near East, Israel, Turkey, Iran, and Afghanistan. Topics include ecology, development of Islam and Muslim empires, traditional adaptive strategies, consequences of colonialism, independence and rise of nation-states, impact of modernization, changing conceptions of kinship, ethnicity, and gender. Credit given for only one of ANTH E600, CEUS U520, or NELC N597. (S&H, CSA)

NELC–N 640 Prophets, Poets, and Kings: Iranian Civilization (3 cr.) Traces the culture, society, and beliefs within Iran from ancient times through the Muslim conquest until 1800. Focuses on politics, religions, administrative/social institutions, secular/ecclesiastic relations, status of minorities, devotional/communal changes, and Iranian influence on Islamic culture. Dynasties covered include Achaemenian through Safavid. Analysis of primary texts in translation.

NELC–N 650 Modern Iran (3 cr.) Examines the history and culture of Iran from 1500 to the present, with an emphasis on developments in the last century, in particular the role of Shi'ism in shaping the history of modern Iran. Readings will cover the historical, religious, and cultural background; the two great revolutions of the twentieth century; and the role of Iran in recent events in the Middle East.

NELC–N 680 Islamic Philosophy (3 cr.) Islamic philosophy, a link between classical and medieval European philosophy, has influenced the development of the western philosophical tradition. Its contributions to the philosophy of religion reflect its contemporary value today as a living tradition in Iran. The course will introduce the major philosophers, schools, and issues of Islamic philosophy.

NELC–N 695 Graduate Topics in Near Eastern Languages and Cultures (1–4 cr.) Special readings in Near Eastern issues and problems within an interdisciplinary format. Previous topics include, "Modern Middle East," "Texts and Authors," "Cultural History of Turkey," "Classical Arabic Rhetoric," and "Modern Persian Literature in Translation."

NELC–N 696 Teaching Less Commonly Taught Languages (3 cr.) Develops and practices skills and techniques for teaching less commonly taught languages in the context of (a) recent approaches and research into language teaching, (b) national needs and standards, (c) fitting with the IU curriculum for these languages. The

course concentrates on languages of the Mid East and Central Asia.

NELC–N 710 M.A. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

NELC–N 720 M.A. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

NELC–N 810 Ph.D. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

Neuroscience

College of Arts and Sciences

Departmental E-mail: iuneuron@indiana.edu

Departmental URL: www.indiana.edu/~neurosci

Curriculum

Degree Offered

Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree

The program leading to the Ph.D. degree is designed to give students the opportunity to develop the technical skills and conceptual frame work necessary for a successful research career in neuroscience. Research should be viewed as the student's greatest challenge and the major focus of the student's energy. Training in behavioral or systems neuroscience is emphasized through research participation with core faculty in the Departments of Biology, Computer Science, Kinesiology, Medical Sciences, Physics, Psychological and Brain Sciences, Speech and Hearing Sciences, and Visual Sciences (Optometry). Students can also draw upon course offerings through the Center for the Integrative Study of Animal Behavior, the Cognitive Science Program, as well as the Department of Chemistry.

Admission Requirements

Undergraduate education that includes an adequate background in chemistry, mathematics, and the biological and behavioral sciences are urged to apply. Students with undergraduate concentrations in other areas of the natural sciences, computer science, or engineering also are encouraged to apply. Preference will be given to applicants with a background in laboratory research and with strong letters of recommendation. Applications must include a complete entrance form, three letters of recommendation, scores on the Graduate Record Examination (GRE), and the undergraduate transcript. At least one score on the GRE must be 600 or above. Students are admitted to the program only with the approval of the program graduate admissions committee.

Course Requirements

A total of 90 credit hours, including dissertation, is required for the Ph.D. An individual program of study is planned for each student in consultation with the student's advisory committee. The aim is to provide each student with a solid background in neuroscience as well as the training necessary to supplement the student's particular research area. Course work consists of N500 and N501 (a one-year core sequence in neuroscience), which must be completed by the fifth semester of residence, and selections totaling at least 14 credit hours from offerings listed by the Program in Neuroscience or cross-listed with other departments, divisions, or special programs. In addition, all doctoral students are required to complete six semesters of N650, a research seminar. Course work must be completed with an average of B+ (3.3) or above. No grades below B– (2.7) may be counted toward degree requirements.

Advisory Committee

Chosen in consultation with the student, the student's research advisor, and the program director. The committee consists of at least three members of the Graduate Faculty who review the student's performance on a regular basis and provide feedback and guidance.

Qualifying Examination

To remain in good standing and be admitted to doctoral candidacy, students must pass a written and oral examination before the end of their fifth semester in residence. Students with a double major may request one additional year before they take the qualifying examination. Students failing the qualifying examination twice will be dismissed from the program.

Final Examination

In addition to the oral defense of the dissertation before the research committee, a public research seminar is required.

Ph.D. Minor in Neural Science

Students in other departments and programs who elect to minor in the Program in Neuroscience must complete the N500-N501 core sequence and at least 6 credit hours of graduate course work selected from the offerings listed by the Program in Neuroscience or cross-listed with other departments. A grade of B (3.0) or higher in each course is required.

Faculty

Director

Professor George V. Rebec*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professor of Psychology

George V. Rebec* (Psychological and Brain Sciences)

Linda and Jack Gill Chair of Neuroscience

Cary Lai* (Psychological and Brain Sciences)
Kenneth Mackie* (Psychological and Brain Sciences)

Rudy Professor

Bennett I. Bertenthal*(Psychological and Brain Sciences)

Eleanor Cox Riggs Professor

Aina Puce* (Psychological and Brain Sciences)

Professors

Robert de Ruyter* (Physics), Joseph Farley* (Psychological and Brain Sciences), Preston E. Garraghty* (Psychological and Brain Sciences), William P. Hetrick* (Psychological and Brain Sciences), David M. Koceja* (Kinesiology), Laura L. Murray* (Speech and Hearing Sciences), Brian F. O'Donnell* (Psychological and Brain Sciences), Dale R. Sengelaub* (Psychological and Brain Sciences), Olaf Sporns* (Psychological and Brain Sciences), Roderick A. Suthers* (Physiology), William D. Timberlake* (Psychological and Brain Sciences)

Associate Professors

T. Rowan Candy* (Optometry), Gregory E. Demas* (Biology), James L. Goodson* (Biology), Justin P. Kumar* (Biology), Jonathan W. Mills* (Informatics), Kyung-Tai Min* (Biology), Luiz Pessoa* (Psychological and Brain Sciences), Anne L. Prieto* (Psychological and Brain Sciences), William P. Shofner* (Speech and Hearing Sciences), G. Troy Smith* (Biology), Cara L. Wellman* (Psychological

Assistant Professors

John M. Beggs* (Physics), Heather B. Bradshaw* (Psychological and Brain Scieces), Joshua W. Brown* (Psychological and Brain Sciences), Theresa A. Burnett (Speech and Hearing Sciences), S. Lee Hong (Kinesiology), Laura Hurley* (Biology), Karin Harman James* (Psychological and Brain Sciences), Thomas W. James* (Psychological and Brain Sciences), Sharlene D. Newman* (Psychological and Brain Sciences), Nicholas Port* (Optometry)

Emeriti

Gabriel P. Frommer* (Psychological and Brain Sciences), Dolores Schroeder* (Anatomy), Alfred Strickholm* (Physiology)

Director of Graduate Studies and Academic Advisor

Professor George V. Rebec*, Psychology Building 361, (812) 855-4832

Courses

NEUS–N 500 Neural Science I (4 cr.) Basic introduction and current trends in cellular neurophysiology, neurocytology, synaptic processes, and neuroanatomy.

NEUS–N 501 Neural Science II (4 cr.) Continuation of Neural Science I emphasizing higher integrative processes such as perception, cognition, and memory. Special emphasis will be placed on timely topics and topics of particular relevance to members of the class.

NEUS–N 510 Cellular and Molecular Neuroscience (3 cr.) Examines the properties and behavior of neurons and glia, the principal cells of the nervous system. The function of neural cells, the molecules involved in these functions, and the organization of molecular components required to generate cellular activity will be considered.

NEUS–N 550 Seminar on Sensorimotor Neuroplasticity (2–3 cr.) P: Graduate status and consent of instructor. This course is intended to introduce students to the research methodologies and experimental findings of studies addressing sensorimotor brain plasticity. While the specific content of the course may vary across semesters, the overarching goal is to provide students with a firm grounding in the primary literature representing this area of research so that they become familiar with the mechanisms of neural plasticity from systemwide to molecular levels.

NEUS–N 611 Neural Bases of Visual Sensation, Perception, and Cognition (3 cr.) Basic neuroanatomy and neurophysiology of the visual system. Correlations will be made with current, biologically-based cognitive models of vision. The goal of this course is to integrate neural and cognitive approaches to the problems of vision.

NEUS–N 612 Ion Channels and Receptors (3 cr.) P: Graduate status and consent of instructor. Molecular, biophysical, and biochemical analysis of the major molecules responsible for neural excitability and synaptic transmission: receptor-coupled ion channels, voltage-dependent ion channels, G-protein coupled receptors, transporters, signal transduction pathways, synaptic vesicle-associated proteins, cytoskeletal proteins, classical and novel neurotransmitters and modulators.

NEUS–N 613 Neural Mechanisms of Hearing (3 cr.) P: Graduate status and consent of instructor. Review of anatomy and physiology of inner ear and central auditory pathways. Special attention to current research on the neural basis of auditory discrimination.

NEUS–N 650 Neuroscience Colloquium Series (1 cr.) P: Graduate status and consent of instructor. Colloquia in this series cover a broad range of topics in neuroscience research.

NEUS–N 700 Readings-Nervous System (arr. cr.) Reading in special topics with guidance from a member of the faculty.

NEUS–N 800 Research (arr. cr.)

Cross-Listed Courses

Animal Behavior

- A501 Seminar in the Integrative Study of Animal Behavior (3 cr.)
- A502 Research and Professional Ethics in Bio-Behavioral Sciences (1 cr.)

Biology

- Z620 Special Topics in Zoology (depending on topic)

Cognitive Science

- Q551 Brain and Cognition (3 cr.)

Computer Science

- B644 Very Large Scale Integration (3 cr.)

School of Health, Physical Education, and Recreation

- K542 Neuromuscular Control of Movement (3 cr.)
- K641 Topics in Motor Integration (3 cr.)
- K690 Seminar in Human Performance (1 cr.) (Topic: Motor Control)

Medical Sciences

- A530 Special Topics (depending on topic)
- A610 Comparative Neuroanatomy (2 cr.)
- F605 Principles of Pharmacology I (4 cr.)

- F606 Principles of Pharmacology II (4 cr.)
- P510 Control Systems Theory in Biology (4 cr.)
- P531 Human Physiology I (3 cr.)
- P532 Human Physiology II (5 cr.)
- P541 Advanced Physiology I: Neurophysiology (3 cr.)
- P543 Neurophysiology Seminar (2 cr.)
- P547 Topical Seminar in Physiology (1-5 cr.) (Biophysics of Membrane Transport)
- P548 Neuroethology (2 cr.)
- Psychological and Brain Sciences
- P417 Animal Behavior (3 cr.)
- P423 Human Neuropsychology (3 cr.)
- P428 Laboratory in Comparative Psychology (3 cr.)
- P436 Laboratory in Animal Learning and Motivation (3 cr.)
- P504 Learning and Motivation (3 cr.)
- P514 Methods in Biopsychology (2 cr.)
- P526 Neurobiology of Learning and Memory (3 cr.)
- P527 Developmental Psychobiology (3 cr.)
- P537 Neurobiology of Addictions
- P566 Psychophysiology of Vision (3 cr.)
- P628 Psychophysiology of Somatic Functions (3 cr.)
- P657 Topical Seminar (1-4 cr.) (depends on subject)
- P667 Neuropsychopharmacology (3 cr.)
- P669 Neurobiology of Behavioral Disorders (3 cr.)
- P717 Evolutionary Bases of Learning (3 cr.)

Speech and Hearing Sciences

- S501 Neural Bases of Speech and Language (3 cr.)
- S513 Speech Anatomy and Physiology
- S515 Topical Seminar (2 cr.) (Conditional)
- S531 Traumatic Brain Injury (2 cr.)
- S537 Diagnosis and Management of Adult Aphasia (3 cr.)
- S540 Voice Disorders (3 cr.)
- S545 Adult Cognitive-Communication Disorders (2 cr.)
- S571 Auditory Anatomy & Physiology (3 cr.)
- S574 Central Auditory Nervous System
- S686 Physiological Research in Speech, Language and Hearing Sciences (3 cr.)

Visual Sciences

- V514 Neuroanatomy (1.5 cr.)
- V648 Neurophysiology of Vision (1 cr.)
- V767 Electrophysiology of Vision (3 cr.)
- V768 Special Topics in Vision Science (3 cr.)
- V785 The Vertebrate Eye (3 cr.)

Philosophy

College of Arts and Sciences

Departmental E-mail: iuphil@indiana.edu

Departmental URL: www.indiana.edu/~phil

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission

Applicants must take the Graduate Record Examination General Test. Those who have an inadequate background in philosophy may, with the approval of their faculty advisor, enroll in P590 for supplemental work, provided that the number of graduate credits so acquired does not exceed 9 credit hours. Upon admission, a graduate major in philosophy will be assigned a departmental faculty advisor who, in conjunction with the director of graduate studies, will help plan the student's program of study.

Master of Arts Degree

Course Requirements

A total of 30 credit hours, at least 20 credit hours of which must be in philosophy. These must include at least one course in each of four subject areas: history of philosophy, metaphysics and epistemology, logic, and value theory.

Grades

A minimum grade of B (3.0) is required in each course that counts toward the degree.

Language/Thesis Requirements

The student must either demonstrate reading proficiency in classical Greek, French, German, or Latin; or write an acceptable thesis. Up to 6 hours of thesis credit may be applied to the course requirements and may be counted in the 20 credit hours of philosophy.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including dissertation (minimum of 30 credit hours).

Grades

A minimum grade point average of 3.0 (B) is required of work that counts toward the degree.

Foreign Language Requirement

There is no general foreign language requirement for the Ph.D. However, a student's Qualifying Committee or Dissertation Committee may require the student to achieve proficiency in a foreign language relevant to the student's research and may set the level of proficiency to be attained and the means of establishing that the required level has been attained. A student should consult with the director of graduate studies about whether he or she will need competence in a foreign language, and this consultation should begin in the student's first year, to allow adequate time for the student to develop competence.

Distribution and Concentration Requirements

The distribution requirements can be satisfied by taking four courses in metaphysics, epistemology, and logic; two courses in value theory; and three courses in the history of philosophy. Generally, concentration requirements can be satisfied by taking a total of four courses in one of these areas. Specific course choices must be approved by the student's graduate advisory committee. Distribution

requirements are normally satisfied by the end of the student's second year and concentration requirements by the end of the third year. Students who are taking extensive course work (18 credit hours or more) in another department outside of philosophy can apply for exemption from two of the nine distribution units.

Qualifying Exam

An essay, together with an oral exam, on a topic that the student plans to pursue further in the dissertation. The qualifying exam will test whether the student is ready to write a dissertation on the chosen topic. Students who have passed the qualifying exam and have satisfied the course and language requirements are ready to be nominated for candidacy. The qualifying exam should normally be taken by the end of three-and-one-half years of graduate study. Students who have not been admitted to candidacy by the beginning of their sixth year will be dropped from the program. Ph.D. students in Philosophy may use the Qualifying Exam essay also to satisfy the Language/Thesis requirement for the M.A. degree (above) if they enroll in 3–6 hours of P590 or P803 during which the essay for the Qualifying Exam is written.

Dissertation Prospectus

A one- or two-page plan of the proposed dissertation that is submitted to the graduate school after it has been approved by the dissertation committee.

Dissertation Chapter Exam

A long essay (about 25 pages long) on the dissertation topic, with an optional oral component. The dissertation chapter exam should be taken within one year of passing the qualifying exam.

Ph.D. Minor in Philosophy

Doctoral students outside the department may minor in philosophy by completing 12 credit hours of graduate-level philosophy courses with a B (3.0) average or higher. No more than 9 credit hours may be taken as P590, and no more than 6 credit hours may be transfer credit hours originally earned at other universities. The program must be approved by the director of graduate studies of the Department of Philosophy. Students planning to take P590 as part of their program must, in addition, obtain consent to do so from the instructor of that course.

Ph.D. Minor and Graduate Area Certificate in Pure and Applied Logic

The Department of Philosophy participates in the Program in Pure and Applied Logic, along with the Departments of Computer Science, Linguistics, and Mathematics. For details of the requirements for the Logic Minor and the Logic Certificate, see the booklet IU Program in Pure and Applied Logic, available in the departmental office, Sycamore 026.

Philosophy Ph.D. students may minor in logic, provided that (1) no courses are double-counted for major and minor, (2) at least three of the minor courses are taken outside the Department of Philosophy, and (3) the courses constituting the minor are approved by the Philosophy Logic Area Committee.

Faculty

Chairperson
Timothy O'Connor*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Oscar R. Ewing Professor

J. Michael Dunn* (Emeritus)

Rudy Professors

Marcia Baron*, Karen Hanson*

Chancellor's Professor

Michael Morgan* (Emeritus)

Professors

Marcia Baron*, Myles Brand*, Nino Cocchiarella* (Emeritus), J. Michael Dunn* (Emeritus), Gary Ebbs*, Paul D. Eisenberg* (Emeritus), Milton Fisk* (Emeritus), Karen Hanson*, Mark Kaplan*, Kirk Ludwig, David Charles McCarty*, Michael McRobbie*, Michael L. Morgan* (Emeritus), Timothy O'Connor*, Frederick F. Schmitt*, Paul Vincent Spade*, Joan Weiner*

Associate Professors

Adam Joaquim Leite*, Dennis Senchuk*, Jonathan M. Weinberg*

Assistant Professors

Kate Abramson*, Sandra Shapshay*

Adjunct Professors

Barry Bull* (Education), James Hart* (Emeritus, Religious Studies), Douglas Hofstadter* (Informatics), Jeffrey Isaac* (Political Science), Oscar Kenshur* (Emeritus, Comparative Literature), Noretta Koertge* (Emerita, History and Philosophy of Science), Daniel Leivant* (Informatics), Elisabeth Lloyd* (History and Philosophy of Science), Larry Moss* (Mathematics), William Rasch* (Germanic Studies), John Walbridge* (Near Eastern Languages and Cultures)

Adjunct Associate Professors

Cornelis de Waal, Robert Eno* (East Asian Languages and Cultures), Luise Prior McCarty* (Education)

Director of Graduate Studies

Joan Weiner*, Sycamore Hall 127, (812) 855-5237

Courses

History

PHIL–P 511 Plato (3 cr.)

PHIL–P 512 Aristotle (3 cr.)

PHIL–P 515 Medieval Philosophy (3 cr.)

PHIL–P 522 Plato (3 cr.) Selected topics from the philosophies of one or more of the following: Continental rationalists (Descartes, Spinoza, Leibniz), British empiricists (Locke, Berkeley, Hume), and Kant.

PHIL–P 526 Nineteenth-Century Philosophy (3 cr.) Selected topics as announced.

PHIL–P 530 Twentieth-Century Analytic Philosophy I (3 cr.) Nineteenth-century British idealism, early Russell, and Moore.

PHIL–P 531 Twentieth-Century Analytic Philosophy II (3 cr.) Logical atomism and logical positivism.

PHIL–P 532 Twentieth-Century Analytic Philosophy III (3 cr.) Trends in recent analytic philosophy.

PHIL–P 535 Phenomenology and Existentialism (3 cr.) Selected topics as announced.

PHIL–P 595 Intensive Reading: Ancient Philosophy from the Greek or Latin Texts (arr. cr.) Substantive philosophical topics investigated directly from Greek or Latin texts. Reading knowledge of ancient Latin or Greek required.

PHIL–P 596 Intensive Reading: Medieval Philosophy from the Sources (arr. cr.) Substantive philosophical topics investigated directly from Latin or Hebrew texts. Reading knowledge of medieval Latin or Hebrew required.

PHIL–P 597 Intensive Reading: Modern Philosophy from the Sources (cr. arr.) Substantive philosophical topics investigated directly from modern foreign language texts. Reading knowledge of language or languages involved is required. May be repeated for credit. (arr. cr.) Substantive philosophical topics investigated directly from Latin or Hebrew texts. Reading knowledge of medieval Latin or Hebrew required.

PHIL–P 710 Seminar: Topics in History of Philosophy (3 cr.) Selected topics from ancient, medieval, or modern philosophy.

PHIL–P 748 Seminar in American Philosophy (3 cr.) Advanced study of a principal philosopher or a set of selected topics in classical American philosophy.

Special Topics

PHIL–P 520 Philosophy of Language (3 cr.) Advanced study of selected topics.

PHIL–P 546 Philosophy of Art (3 cr.) In-depth discussion of contemporary aesthetic theories.

PHIL–P 553 Philosophy of Science (3 cr.) The aim of this course is to gain a thorough understanding of the basic issues in the philosophy of science. Attention will be given to issues such as the cognitive significance of theories, the scientific method (hypothesis formation, theory construction, and testing), research paradigms, reductivism, and social epistemology.

PHIL–P 561 Philosophy of Mind (3 cr.) In-depth discussion of representative contemporary theories.

PHIL–P 570 Philosophical Psychology (3 cr.)

PHIL–P 720 Seminar: Philosophy of Language (3 cr.) Advanced topics in the philosophy of language; e.g., reference, meaning of truth, nature of language.

Ethics

PHIL–P 540 Contemporary Ethical Theories (3 cr.) Fundamental problems of ethics in contemporary analytic philosophy, from G. E. Moore's Principia Ethica to present.

PHIL–P 541 Selected Topics in the History of Ethics (3 cr.) Selected topics in the history of ethics, ancient, medieval, or modern.

PHIL–P 542 The Ethics and Values of Philanthropy (3 cr.) An inquiry into the ethics and values of philanthropy, rooted in a general understanding of philanthropy as voluntary action of the public good and as an ethical ideal. A consideration of philanthropic activity in light of the ideal.

PHIL–P 548 Clinical Ethics Practicum (3 cr.) This course provides learning experiences both in the classroom and in clinical settings, enabling students to fully appreciate ethical issues that face health care professionals. The course will be team taught by IUPUI faculty and clinicians, with support from the IU Center for Bioethics.

PHIL–P 694 Biomedical Ethics (3 cr.) A rigorous examination of bioethical theory and practice. Emphasis is placed on moral and conceptual issues embedded in biomedical research, clinical practice, and social policy relating to the organization and delivery of health care.

PHIL–P 740 Seminar: Ethical Theory (3 cr.) Selected topics in ethical theory.

Social and Political Philosophy

PHIL–P 543 Contemporary Social and Political Philosophy (3 cr.)

PHIL–P 544 Selected Topics in History of Social and Political Philosophy (3 cr.) Selected topics in the history of social and political philosophy, ancient, medieval, or modern.

PHIL–P 743 Seminar: Social and Political Theory (3 cr.) Selected topics in social and political theory.

Law

PHIL–P 545 Legal Philosophy (3 cr.) An introduction to major legal philosophers and fundamental legal philosophical questions.

PHIL–P 350 Logic of Sets (3 cr.)

PHIL–P 505 Logical Theory I (3 cr.) P: P250 or equivalent. A survey of modern logic consisting of syntactic and semantic (proof-theoretic and model-theoretic) treatments of the propositional and predicate calculi.

PHIL–P 506 Logical Theory II (3 cr.) P: P505 or equivalent. A survey of central metatheoretic topics in modern logic with special emphasis on (a) model theory and first-order completeness, (b) incompleteness and undecidability results of Gödel and Church, and (c) recursive function theory.

PHIL–P 550 Systems of Modal Logic (3 cr.) P: P251 or consent of instructor. Formal semantical and syntactical analysis of modal concepts, including temporal, dontic, epistemic, and general pragmatic modalities.

PHIL–P 551 Philosophy and Foundations of Mathematics (3 cr.) P: P251 or consent of instructor. P350. Philosophical and formal investigations on the foundations of mathematics. Examination of logicism, on the nature of mathematics, mathematical entities, and

mathematical truth. Gödel's incompleteness theorem and its philosophical significance.

PHIL–P 552 Philosophy of Logic (3 cr.) P: P251 or consent of instructor. Philosophical issues on the nature of logic, alternative logics, the ontological commitments of logic, the analytic-synthetic dichotomy, the analysis of logical truth, etc. History of logic.

PHIL–P 750 Seminar: Logical Theory (3 cr.) Selected problems in the interpretation and application of logical systems. Topics such as model theory, nonstandard logics, and theory of meaning will be discussed.

PHIL–P 751 Seminar: Logic (3 cr.) Selected topics in advanced logic; e.g., set theory, recursive function theory, foundations of mathematics.

Metaphysics

PHIL–P 560 Metaphysics (3 cr.) In-depth discussion of representative contemporary theories.

PHIL–P 571 Philosophy of Nature (3 cr.) In-depth study of representative contemporary theories of space, time, causality, action, dispositions, and particulars.

PHIL–P 760 Seminar: Metaphysics and Epistemology (3 cr.) Advanced topics in metaphysic or epistemology, or both.

Theory of Knowledge

PHIL–P 562 Theory of Knowledge (3 cr.) Twentieth-century developments.

PHIL–P 730 Seminar: Contemporary Philosophy (3 cr.) Twentieth-century developments.

Philosophy of Science

PHIL–X 456 Historical Development of Philosophy of Science (3 cr.)

PHIL–X 551 Survey of the Philosophy of Science I (3 cr.)

PHIL–X 552 Survey of the Philosophy of Science II (3 cr.)

PHIL–X 571 Research Topics in the Philosophy of Science (1–3 cr.)

PHIL–X 600 Advanced Readings Course (arr. cr.) **These courses are eligible for a deferred grade.

PHIL–X 654 Seminar: Philosophy of the Social Sciences (4 cr.)

PHIL–X 683 Philosophical Problems of Quantum Mechanics (4 cr.)

PHIL–X 691 Seminar: Philosophical Problems of Space and Time I (4 cr.)

PHIL–X 692 Seminar: Philosophical Problems of Space and Time II (4 cr.)

PHIL–X 755 Special Topics in the Philosophy of Science I (2–5 cr.)

PHIL–X 756 Special Topics in the Philosophy of Science II (2–5 cr.)

Special Research

PHIL–G 599 Thesis Research (0 cr.)

PHIL–G 901 Advanced Research (6 cr.)

PHIL–P 590 Intensive Reading (1–3 cr.) A tutorial course involving in-depth consideration of a specific philosophical area of problem or author.

PHIL–P 803 Master's Thesis in Philosophy (arr. cr.) **These courses are eligible for a deferred grade.

PHIL–P 805 Doctor's Thesis in Philosophy (arr. cr.) **These courses are eligible for a deferred grade.

Physics

College of Arts and Sciences

Departmental E-mail: gradphys@indiana.edu

Departmental URL: physics.indiana.edu

Curriculum

Chairperson

Professor Richard Van Kooten*

Degrees Offered

Master of Science, Master of Arts for Teachers, and Doctor of Philosophy. The department also participates in the Ph.D. programs in astrophysics, chemical physics, and mathematical physics (described elsewhere in this bulletin).

Special Departmental Requirements

(See also general University Graduate School requirements.)

Grades

B average (3.0) required. See special requirement under "Master of Science Degree" for courses numbered below 501 that are to be counted toward that degree.

Master of Science Degree

Admission Requirements

Physics P201, P202, P301, P309, P331, P332, and P340 (or equivalents); Mathematics M211-M212, M311 (or equivalents). Deficiencies must be removed without graduate credit.

Course Requirements

A total of 30 credit hours, 20 in physics, of which at least 14 credit hours must be in physics courses numbered 501 or above. Seminars, research, and reading courses may not be counted toward this 14 credit hour requirement. Physics courses numbered below 501 that are listed in this bulletin may count toward the 30 credit hour requirement only if passed with a grade of B (3.0) or above.

Thesis

Not required.

Final Examination

Written. May be taken only twice.

Master of Science in Beam Physics and Technology Degree

Admission Requirements

Same as for Master of Science degree.

Course Requirements

A total of 30 credit hours, including the following: proof of proficiency in undergraduate senior-level classical mechanics and electromagnetism, or passing the Classical Mechanics and Electromagnetism in Beams examination offered by the U.S. Particle Accelerator School (USPAS) with grade B or higher, P570, one course at the 500 level or above in laboratory techniques or computational methods, and a master's thesis course (P802). Four advanced courses in beam physics should be chosen from among the special topics courses P571, P671, and P672, with topics to be listed in a syllabus prepared jointly by the Department of Physics and USPAS. A grade point average of 3.0 or better must be maintained in the courses satisfying the 30 credit hour requirement. In particular, both senior-level classical mechanics and electromagnetism (or equivalents) must be passed with a grade of B (3.0) or above.

Thesis

Required.

Final Examination

Either a defense of the thesis or a written final examination is required, and should take place at Indiana University. The written examination may be substituted for the defense only with the permission of the thesis committee. The defense of the thesis will follow the same guidelines as the Master of Science thesis of the Indiana University Graduate School.

Master of Arts for Teachers Degree

Admission Requirements

8 credit hours of undergraduate physics courses.

Course Requirements

20 credit hours in physics courses numbered P300 or higher, selected from the course listings that follow (recommended: P301, P309, P331, P332, P360, P451, P453, P454), the remaining 16 credit hours in graduate education and in mathematics, astronomy, chemistry, or computer science. Candidates for the M.A.T. must obtain a teacher's certificate (or license) by the time they complete the M.A.T.

Doctor of Philosophy Degree

Admission Requirements

Same as those for Master of Science degree.

Course Requirements

A total of 90 credit hours, including two courses in one of the following six areas: accelerator physics (P671 plus one of P633, P634, P640, P641, P672), biological physics (P575 plus one of P581, P582, P583, P676), chemical physics (P615 or P557 plus one of P614, P616, P625, or P627), condensed-matter physics (P557, P615, P616, P627, P657), high-energy physics (P635, P636, P640, P641, P707, P708), mathematical physics (P607, P609, P610, P622, P625, P637, P638, P647, P665, P743), nuclear physics (P626, G630, P633, P634, P640, P641). Courses offered for the (optional) inside minor cannot be used to satisfy this requirement. A minimum of 9 credit hours per semester at the P501 level or above with a minimum 3.0 (B) grade point average is required. Mathematics courses suited to the student's fields will be specified by advisors in the Department of Physics.

Minor

The minor may be taken either inside or outside of the department. The inside minor for all majors except biological physics consists of either P621 or P625, and at least two courses, falling within at least two nonmajor areas of concentration, among six areas: accelerator physics (P570, P671, or P672), chemical or condensed-matter physics (P557, P615, P616, P657, P627), high-energy physics: P535, P635, P636, P640, P641, P707, P708), mathematical physics (P522, P607, P609, P610, P622, P625, P637, P638, P647, P665, P743), nuclear physics (P535, P537, P626, G630, P633, P634, P640, P641), biological physics (P548, P575, P581, P582, P583, P676) or electronics (P540, P541). For biological physics the inside minor consists of at least two different courses, falling within two of the six areas of concentration. Programs of study for outside minors are determined by the individual departments and typically require 9 to 12 credit hours of course work. Recommended outside fields: astronomy, chemistry, mathematics, biology, biochemistry, and scientific computing. All outside minors must be approved by the graduate advisor of the Department of Physics. Note that P535 Introduction to Nuclear and Particle Physics cannot be counted toward the inside minor for students specializing in either nuclear physics or high-energy physics. For students specializing in other fields, P535 can be counted once toward the inside minor and can be considered as a course in either nuclear physics or high-energy physics for that purpose.

Outside Minor in Physics

For students in other departments who wish an outside minor in physics, the requirement is a minimum of 9 credit hours at the 501 level or above. The grade point average for the 9 credit hours must be at least 3.0. Students who wish to complete the physics minor should bring the Nomination to Candidacy form to the Physics Academic Services Office for a signature upon completion of this requirement.

Qualifying Examination

Written. May be taken only twice. Must be taken at the end of the first year and must be passed by the end of the second year. The written examination covers the subjects of mechanics, electricity and magnetism, quantum mechanics, and thermodynamics/statistical physics at the level of first-year graduate work. Relevant courses are P506, P507, P511, P512, P521, and P556. Not attempting the qualifying examination at the required time constitutes an automatic failure.

Candidacy Seminar

Must be presented after the first attempt at the qualifying examination but before the end of the fifth semester. Usually pertains to a proposed dissertation topic.

Dissertation

Result of a significant piece of original research.

Final Examination

Oral defense of dissertation.

Mathematical Physics

The Doctor of Philosophy Degree in Mathematical Physics is described elsewhere in the Bulletin.

Faculty

Chairperson

Professor Richard Van Kooten*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Steven A. Gottlieb*, V. Alan Kostelecky*, Roger Newton* (Emeritus), Robert Pollock* (Emeritus)

Professors

Andrew D. Bacher* (Emeritus), David V. Baxter*, Robert Bent* (Emeritus), Micheal S. Berger*, John L. Challifour* (Emeritus, Mathematics), Ray Crittenden* (Emeritus), Robert R. de Ruyter*, Alex R. Dzierba* (Emeritus), Herbert Abraham Fertig*, James A. Glazier*, Charles Goodman* (Emeritus), Richard Hake* (Emeritus), Richard Heinz* (Emeritus), Archibald Hendry* (Emeritus), Charles J. Horowitz*, Larry Lee Kesmodel*, S. Y. Lee*, Andrew Lenard* (Emeritus), Don Lichtenberg* (Emeritus), J. Timothy Londergan*,Mark D. Messier*, Hans-Otto Meyer* (Emeritus), Daniel Miller* (Emeritus), James A. Musser*, Hermann Nann* (Emeritus), Harold Olof Ogren*, Catherine Olmer*, Gerardo Ortiz*, Roger Pynn*, William L. Schaich* (Emeritus), Peter Schwandt* (Emeritus), Brian David Serot*, William Michael Snow*, Paul E. Sokol*, James Swihart* (Emeritus), Adam P. Szczepaniak*, Richard James Van Kooten*, George Walker* (Emeritus), John Wills* (Emeritus), Scott W. Wissink*

Senior Scientists

Charles Bower* (Astronomy), Pauline Gagnon*, William Jacobs* (Emeritus), Fred Luehring, James Sowinski*, Edward Stephenson*, Daria Zieminska*

Associate Professors

John M. Beggs*, John P. Carini*, Harold Evans*, Fred Lurie* (Emeritus), Sima Setayeshgar*, Rex Tayloe*, Jon Urheim*

Assistant Professors

Dobrin Petrov Bossev*, Radovan Dermisek, Mark Harry Hess*, Sabine Lammers, Chen-Yu Liu*, Josh Long, Matthew Shepherd*

Graduate Advisor

Professor Micheal Berger*, Swain Hall West 235, (812) 855-2609

Courses

PHYS–P 301 Physics III (3 cr.)

PHYS–P 309 Modern Physics Laboratory (2 cr.)

PHYS–P 331 Theory of Electricity and Magnetism I (3 cr.)

PHYS–P 332 Theory of Electricity and Magnetism II (3 cr.)

PHYS–P 340 Thermodynamics and Statistical Mechanics (3 cr.)

PHYS–P 360 Modern Optics (3 cr.)

PHYS–P 410 Computing Applications in Physics (3 cr.)

PHYS–P 441 Analytical Mechanics I (3 cr.)

PHYS–P 442 Analytical Mechanics II (3 cr.)

PHYS–P 451 Atomic and Nuclear Physics Laboratory I (2 cr.)

PHYS–P 453 Introduction to Quantum Physics (3 cr.)

PHYS–P 454 Modern Physics (4 cr.)

PHYS–P 460 Modern Optics (4 cr.) P: P331 or consent of instructor. Physical optics and electromagnetic waves based on electromagnetic theory, wave equations; phase and group velocity; dispersion; coherence; interference; diffraction; polarization of light and of electromagnetic radiation generally; wave guides; holography; masers and lasers; introduction to optical spectroscopy.

PHYS–P 500 Seminar (1 cr.) Reports on current literature. Graduate students and staff participate.

PHYS–P 504 Practicum in Physics Laboratory Instruction (1 cr.) Practical aspects of teaching physics labs. Meets the week before classes and one hour per week during the semester to discuss goals, effective teaching techniques, grading standards, AI-student relations, and administrative procedures as applied to P201. Students enrolling in this course teach a section of P201 laboratory.

PHYS–P 506 Electricity and Magnetism I (4 cr.) Three hours of lectures and one hour of recitation. Development of Maxwell's equations. Conservation laws. Problems in electrostatics and magnetostatics. Introduction to the special functions of mathematical physics. Time-dependent solutions of Maxwell's equations. Motion of particles in given electromagnetic fields. Elementary theory of radiation. Plane waves in dielectric and conducting media. Dipole and quadruple radiation from nonrelativistic systems.

PHYS–P 507 Electricity and Magnetism II (4 cr.) Three hours of lectures and one hour of recitation. Further development of radiation theory. Fourier analysis of radiation field and photons. Scattering and diffraction of electromagnetic waves. Special relativity. Covariant formulation of electromagnetic field theory.

PHYS–P 508 Current Research in Physics (1 cr.) Presentations by faculty members designed to give incoming graduate students an overview of research opportunities in the department.

PHYS–P 511 Quantum Mechanics I (4 cr.) Three hours of lectures and one hour of recitation. Basic principles, the Schrödinger equation, wave functions, and physical interpretation. Bound and continuum states in one-dimensional systems. Bound states in central potential; hydrogen atom. Variational method. Time-independent perturbation theory.

PHYS–P 512 Quantum Mechanics II (4 cr.) P: P511. Three hours of lectures and one hour of recitation. Time-dependent perturbation theory. Schrödinger, Heisenberg and interaction pictures. Elementary theory of scattering. Rotations and angular momentum. Other symmetries. Nonrelativistic, many-particle quantum mechanics, symmetry and antisymmetry of wave functions, and Hartree-Fock theory of atoms and nuclei.

PHYS–P 518 Scattering Methods in Materials Science (3 cr.) P: Graduate status. Introduction to Neutron and X-ray Scattering techniques used in Materials Physics. Basic Scattering Theory; Structural Measurements of Ordered, Disordered and Nano Materials; stress and Strain Measurements; Imaging; Inelastic Neutron and X-ray Scattering; EXAFS and NEXAFS: Polarized Neutrons and X-rays; Proposal Writing.

PHYS–P 521 Classical Mechanics (3 cr.) P: Graduate status. Vector and tensor analysis. Lagrangian and Hamiltonian dynamics. Conservation laws and variational principles. Two-body motion, many-particle systems, and rigid-body motion. Canonical transformations and Hamilton-Jacobi theory. Continuum mechanics with introduction to complex variables.

PHYS–P 522 Advanced Classical Mechanics (3 cr.) Mathematical methods of classical mechanics; exterior differential forms, with applications to Hamiltonian dynamics. Dynamical systems and nonlinear phenomena; chaotic motion, period doubling, and approach to chaos.

PHYS–P 535 Introduction to Nuclear and Particle Physics (3 cr.) P: P453 or equivalent. Survey of the properties and interactions of nuclei and elementary particles. Experimental probes of subatomic structure. Basic features and symmetries of electromagnetic, strong and weak forces. Models of hadron and nuclear structure. The role of nuclear and particle interactions in stars and the evolution of the universe.

PHYS–P 537 Neutron Physics and Scattering (3 cr.) An interdisciplinary survey of the physics of neutrons, ideas and techniques of neutron scattering. Examples taken from applications of neutron scattering in biology, chemistry, geology, materials science, and physics.

PHYS–P 540 Digital Electronics (3 cr.) Digital logic, storage elements, timing elements, arithmetic devices, digital-to-analog and analog-to-digital conversion. Course has lectures and labs emphasizing design, construction, and analysis of circuits using discrete gates and programmable devices.

PHYS–P 541 Analog Electronics (3 cr.) Amplifier and oscillator characteristics feedback systems, bipolar transistors, field-effect transistors, optoelectronic devices, amplifier design, power supplies, and the analysis of circuits using computer-aided techniques.

PHYS–P 548 Mathematical Methods for Biology (3 cr.) Physical principles applied to modeling biological systems to obtain analytical models that can be studied mathematically and tested experimentally.

PHYS–P 551 Modern Physics Laboratory (3 cr.) Graduate-level laboratory; experiments on selected aspects of atomic, condensed-matter, and nuclear physics.

PHYS–P 556 Statistical Physics (3 cr.) The laws of thermodynamics; thermal equilibrium, entropy, and thermodynamic potentials. Principles of classical and quantum statistical mechanics. Partition functions and statistical ensembles. Statistical basis of the laws of thermodynamics. Elementary kinetic theory.

PHYS–P 557 Solid State Physics (3 cr.) P: P453 or equivalent. Atomic theory of solids. Crystal and band theory. Thermal and electromagnetic properties of periodic structures.

PHYS–P 570 Introduction to Accelerator Physics (3 cr.) P: Approval of instructor. Overview of accelerator development and accelerator technologies. Transverse phase space motion and longitudinal synchrotron motion of a particle in an accelerator. Practical accelerator lattice design. Design issues relevant to synchrotron light sources. Basics of free electron lasers. Spin dynamics in cyclic accelerators and storage rings

PHYS–P 571 Special Topics in Physics of Beams (3 cr.) P: Approval of instructor.

PHYS–P 575 Introduction to Biophysics (3 cr.) Physics P575 presents an introduction to Biophysics. Topics include: properties of biomolecules and biomolecular complexes; biological membranes, channels, neurons; Diffusion, Brownian motion; reaction-diffusion processes, pattern formation; sensory and motor systems; psychophysics and animal behavior, statistical inference.

PHYS–P 581 Modeling and Computation in Biophysics (3 cr.) Introduction to modeling and computational methods applied to phenomena in Biophysics. Topics: population dynamics; reaction kinetics; biological oscillators; coupled reaction networks; network theory; molecular motors; limit cycles; reaction diffusion models; the heart; turning instability; bacterial patterns; angiogenesis.

PHYS–P 582 Biological and Artificial Neural Networks (3 cr.) Biological details of neurons relevant to computation. Artificial neural network theories and models, and relation to statistical physics. Living neural networks and critical evaluation of neural network theories. Student final projects will consist of programming networks and applying them to current research topics.

PHYS–P 583 Signal Processing and Information Theory in Biology (3 cr.) Probability and statistics. Filtering. Correlation functions and power spectra. Time invariant and time-varying systems. Shannon Information. Coding and decoding. Processing of sensory signals and other applications to neurobiology and psychophysics.

PHYS–P 607 Group Representations (3 cr.) P: Consent of instructor. Elements of group theory. Representation theory of finite and infinite compact groups. Study of the point crystal, symmetric, rotation, Lorentz, and other classical groups as time permits. Normally offered in alternate years; see also MATH M607-M608.

PHYS–P 609 Computational Physics (3 cr.) Designed to introduce students (1) to numerical methods for quadrature, solution of integral and differential equations, and linear algebra; and (2) to the use of computation and computer graphics to simulate the behavior of complex physical systems. Topics will vary.

PHYS–P 610 Computational Physics II (3 cr.) Second semester of computational physics focusing on more advanced topics; e.g.: fractals, kinetic growth models, models in statistical mechanics, quantum systems and fast Fourier transforms, parallel computing.

PHYS–P 615 Condensed Matter Physics I (3 cr.) P: P512. Mechanical, thermal, electric, and magnetic properties of solids; crystal structure; band theory; semiconductors; phonons; transport phenomena; superconductivity; superfluidity; and imperfections. Usually given in alternate years.

PHYS–P 616 Condensed Matter Physics II (3 cr.) P: P512. Mechanical, thermal, electric, and magnetic properties of solids; crystal structure; band theory; semiconductors; phonons; transport phenomena; superconductivity; superfluidity; and imperfections. Usually given in alternate years.

PHYS–P 621 Relativistic Quantum Field Theory I (4 cr.) P: P512. Introduction to quantum field theory, symmetries, Feynman diagrams, quantum electrodynamics, and renormalization.

PHYS–P 622 Relativistic Quantum Field Theory II (4 cr.) P: P621. Non-Abelian gauge field theory, classical properties, quantization and renormalization, symmetries and their roles, and nonperturbative methods.

PHYS–P 625 Quantum Many-Body Theory I (3 cr.) P: P512. Elements of nonrelativistic quantum field theory: second quantization, fields, Green's functions, the linked-cluster expansion, and Dyson's equations. Development of diagrammatic techniques and application to the degenerate electron gas and imperfect Fermi gas. Canonical transformations and BCS theory. Finite-temperature (Matsubara), Green's functions, and applications.

PHYS–P 626 Quantum Many-Body Theory II-Nuclear (3 cr.) P: P625. Continued development of nonrelativistic, many-body techniques, with an emphasis on nuclear physics: real-time, finite-temperature Green's functions, path-integral methods, Grassmann algebra, generating functionals, and relativistic many-body theory. Applications to nuclear matter and nuclei.

PHYS–P 627 Quantum Many-Body Theory II-Condensed Matter (3 cr.) P: P625. Continued development of nonrelativistic many-body techniques with an emphasis on condensed-matter physics: properties of real metals, superconductors, superfluids, Ginzburg-Landau theory, critical phenomena, order parameters and broken symmetry, ordered systems, and systems with reduced dimensionality.

PHYS–P 630 Nuclear Astrophysics (3 cr.) P: A451-A452, P453-P454, or consent of instructor. A550, P611. Fundamental properties of nuclei and nuclear reactions, and the applications of nuclear physics to astronomy. The static and dynamic properties of nuclei; nuclear reaction rates at low and high energies. Energy generation and element synthesis in stars; the origin and evolution of the element abundances in cosmic rays.

PHYS–P 633 Theory of the Nucleus I (3 cr.) P: P512. Nuclear forces, the two-nucleon problem, systematics and electromagnetic properties of nuclei, nuclear models, nuclear scattering and reactions, theory of beta-decay, and theory of nuclear matter.

PHYS–P 634 Theory of the Nucleus II (3 cr.) P: P512. Nuclear forces, the two-nucleon problem, systematics and electromagnetic properties of nuclei, nuclear models, nuclear scattering and reactions, theory of beta-decay, and theory of nuclear matter.

PHYS–P 635 Frontier Particle Physics I (3 cr.) This course focuses on the frontier of particle physics. Topics include Standard-Model physics, neutrino masses, tests of fundamental symmetries, anomalies, grand unified theories, higher-dimensional theories, supersymmetry, composite models, supergravities, string and superstring theory.

PHYS–P 636 Frontier Particle Physics II (3 cr.) This course focuses on the frontier of particle physics. Topics include Standard-Model physics, neutrino masses, tests of fundamental symmetries, anomalies, grand unified theories, higher-dimensional theories, supersymmetry, composite models, supergravities, string and superstring theory.

PHYS–P 637 Theory of Gravitation I (3 cr.) Introduction to the general theory of relativity, stress-energy tensor, parallel transport, geodesics, Einstein's equation, differential geometry, manifolds, general covariance, bending of light, perihelion advance. Modern cosmology: Robertson-Walker metric, equations of state, Friedmann equations, Hubble's law, redshift, cosmological constant, inflation, quintessence, cosmic microwave background, Big Bang nucleosynthesis, structure formation. See MATH M637.

PHYS–P 638 Theory of Gravitation II (3 cr.) Gravitation waves, Schwarzschild geometry and black holes, Kerr metric, Reissner-Nordstrom metric, extremal black holes, Penrose diagrams, Hawking radiation, Lie derivatives, isometries and Killing vectors, variational principle and the Palatini formalism, spinors in general relativity, vierbeins, gravitation as a gauge theory, quantum gravity. See MATH M638.

PHYS–P 640 Subatomic Physics I (3 cr.) P: P512, C: P621. Experimental methods and theoretic description of particle and nuclear physics: applied relativistic quantum mechanics, symmetries of fundamental interactions, experimental techniques, structure of the nucleon, electromagnetic and weak interactions, elementary particles, and the Standard Model. PHYS P640 may be substituted for P633 in degree requirements.

PHYS–P 641 Subatomic Physics II (3 cr.) P: P640. Quarks and gluons in QCD, the parton model, strong interactions at low energies, nuclear environment and models, nuclear thermodynamics and subatomic physics in cosmology and astrophysics. PHYS P641 may be substituted for P634 in degree requirements.

PHYS–P 647 Mathematical Physics (3 cr.) P: P501 or P502, P521, or MATH M442. Topics vary from year to year. Integral equations, including Green's function

techniques, linear vector spaces, and elements of quantum mechanical angular momentum theory. For students of experimental and theoretical physics. May be taught in alternate years by members of Departments of Physics or Mathematics, with corresponding shift in emphasis; see MATH M647.

PHYS–P 657 Statistical Physics II (3 cr.) Continuation of P556. Topics include advanced kinetic and transport theory, phase transitions, and nonequilibrium statistical mechanics.

PHYS–P 665 Scattering Theory (3 cr.) P: P506, P511. Theoretical tools for analysis of scattering experiments. Electromagnetic theory, classical and quantum particle dynamics.

PHYS–P 671 Special Topics in Accelerator Physics (3 cr.) P: P570, P521. Nonlinear dynamics: betatron phase space distortion due to the nonlinear forces. Methods of dealing with nonlinear perturbations. Multiparticle dynamics: microwave and coupled bunch instabilities. Physics of electron cooling and stochastic cooling. Advanced acceleration techniques: inverse free electron laser acceleration, wakefield and two-beam acceleration.

PHYS–P 672 Special Topics in Accelerator Technology and Instrumentation (3 cr.) P: Consent of instructor.

PHYS–P 676 Selected Topics in Biophysics (3 cr.) This course presents papers on current topics in Biophysics, together with key classical papers related to those topics. Student participation in discussions is essential. Each student is expected to write two essays on two of the topics presented.

PHYS–P 700 Topics in Theoretical Physics (arr. cr.)

PHYS–P 702 Seminar in Nuclear Spectroscopy (arr. cr.)

PHYS–P 703 Seminar in Theoretical Physics (arr. cr.)

PHYS–P 704 Seminar in Nuclear Reactions (arr. cr.)

PHYS–P 705 Seminar in High-Energy Physics and Elementary Particles (arr. cr.)

PHYS–P 706 Seminar in Solid State Physics (arr. cr.)

PHYS–P 707 Topics in Quantum Field Theory and Elementary Particle Theory (3 cr.)

PHYS–P 708 Topics in Quantum Field Theory and Elementary Particle Theory (3 cr.)

PHYS–P 743 Topics in Mathematical Physics (3 cr.) For advanced students. Several topics in mathematical physics studied in depth; lectures and student reports on assigned literature. Content varies from year to year. May be taught in alternate years by members of Departments of Physics or Mathematics, with corresponding shift in emphasis; see MATH M743.

PHYS–P 750 Topics in Astrophysical Sciences (1–3 cr.) A seminar in astrophysics with special emphasis on subjects involving more than one department. Examples of such topics include planetology, nucleosynthesis, nuclear cosmochronology, isotopic anomalies in meteorites, particle physics of the early universe, and atomic processes in astrophysical systems.

PHYS–P 782 Topics in Experimental Physics (1–4 cr.)

PHYS–P 790 Seminar in Mathematical Physics (arr. cr.)

PHYS–P 800 Research (arr. cr.) S/F grading. Experimental and theoretical investigations of current problems; individual staff guidance.

PHYS–P 801 Readings (arr. cr.) S/F grading. Readings in physics literature; individual staff guidance.

PHYS–P 802 Research (arr. cr.) Experimental and theoretical investigations of current problems; individual staff guidance. Graded by letter grade.

PHYS–P 803 Readings (arr. cr.) Readings in physics literature; individual staff guidance. Graded by letter grade.

PHYS–G 750 Topics in Astrophysical Sciences (1–3 cr.)

Political Science

College of Arts and Sciences

Departmental E-mail: laroches@indiana.edu

Departmental URL: www.indiana.edu/~iupolsci/

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Satisfactory scores on the Graduate Record Examination (verbal and quantitative sections); satisfactory previous academic record; three letters of recommendation; writing sample. International students must complete the TOFEL with a satisfactory score. Applicants holding no academic degree higher than the bachelor's degree may be admitted as Ph.D. students.

Master of Arts Degree

Course Requirements

A total of 30 credit hours, including Y570. At least 15 of the 30 credit hours must be in graduate courses (500 level or higher). Each graduate student must complete five graduate seminars in political science, averaging at least a grade of B (3.0) in all seminars, to qualify for the M.A. degree. (For students entering with previous graduate work, the director of graduate studies, with the recommendation of the student's M.A. committee, can reduce the number of required seminars based on the prior graduate training.)

Essay

Required. The essay may be based on a research paper prepared in a departmental seminar. If a new paper is written and presented as a thesis, it may receive no more than 4 hours of credit. The essay must be presented to

all members of the examining committee, prior to the examination, for approval.

Foreign Language/Research-Skill Requirement

The student must demonstrate reading proficiency in one foreign language or proficiency in an approved research skill. Students specializing in public policy must use an approved research skill, not a foreign language, to meet this requirement.

Other Provision

Work taken to meet the requirements of such programs as the area certificate of the Russian and East European Institute may be applied toward the M.A. degree.

Final Examination

An oral examination for the M.A. degree may be conducted by a faculty committee and will cover both the student's course of study and required essay.

Master of Arts for Teachers Degree

Information regarding this degree program may be obtained from the School of Education.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including dissertation. Y570 Introduction to the Study of Politics is to be taken in the first year of residence. Students who select a field with an approaches-and-issues seminar should take the seminar during the first two years of residence. Each graduate student must complete 10 graduate seminars numbered 500 and above in political science (excluding directed reading and directed research courses), averaging at least a B (3.0) in all seminars, prior to nomination to candidacy for the Ph.D. degree. (For students entering with previous graduate work, the director of graduate studies, with the recommendation of the student's advisory committee, can reduce the number of required seminars based on the prior graduate training.) A substantial research paper is required at the end of a student's second year. This paper should represent original research performed by the student. The advisory committee will evaluate whether the student's paper is adequate for purposes of this requirement.

Fields of Study

The student will select two fields in political science from the following: American politics; international relations; comparative politics; public policy; political philosophy; theory and methodology.

In exceptional cases, with the written approval of the director of graduate studies, the student may offer as one of the fields a course of study that cuts across two of the established fields.

Minors

The outside minor requirement is typically satisfied by completing four courses in one or more related departments or in an interdepartmental program, embracing either substantive material or methodology. Some departments or other programs have specific requirements for a Ph.D. minor; students should check with the relevant unit for details. Students selecting an "eclectic" minor must have the proposed set of courses approved by the advisory committee, the director of graduate studies, and the graduate school.

Advisory Committee

Each student will be assigned an advisory committee, which will include two faculty members from each of the student's two fields in political science and a representative of the outside minor. (Students choosing an eclectic minor need not have a representative of that minor.) The chairperson of the committee serves as the student's principal advisor. The committee will supervise the student's course of study. Early in the student's residence, but in no case later than the third semester of study, the advisory committee will provide the student with a formal review of progress toward the degree.

Foreign Language/Research-Skill Requirement

The student must demonstrate proficiency in any two of the following: a foreign language, mathematics, logic, statistics, or computer science. With the approval of the advisory committee, the student may qualify in a single language or research skill at an advanced level, rather than in two. To qualify in a language at the advanced level, the student must satisfy the in-depth proficiency requirement. For rules regarding qualification in a research skill at the advanced level, consult the director of graduate studies. The student is expected to make satisfactory progress in meeting the requirements for the degree; in particular, the student must satisfy the first language or research-skill requirement during the first year of study and the second requirement no later than the second year.

Qualifying Examination

Students must take qualifying examinations in each of their two fields of study in political science. The qualifying field examination is intended to evaluate the student's substantive knowledge and analytical ability in both of the student's fields of study. The written qualifying examination is administered two times a year: in the fall and spring.

Research Committee

Upon completion of the qualifying examination and presentation of a satisfactory dissertation proposal, the student will be nominated to candidacy for the Ph.D. The University Graduate School, on the recommendation of the department, will appoint a research committee to supervise the dissertation.

Final Examination

Covers the field of study related to the dissertation and defense of the dissertation.

Faculty

Chairperson

Professor Russell L. Hanson*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Rudy Professors

Edward G. Carmines*, Jeffrey C. Isaac*

Arthur F. Bentley Professors

Elinor Ostrom* (Public and Environmental Affairs), Vincent Ostrom* (Emeritus)

Donald A. Rogers Professor

William R. Thompson*

Warner O. Chapman Professor

Edward G. Carmines*

Professors

Yvette M. Alex-Assensoh*, William Bianco*, Jack Bielasiak*, Alfred Diamant* (Emeritus), William Fierman* (Central Eurasian Studies), Luis Fuentes-Rohwer (Law), Norman S. Furniss* (Emeritus), Sumit Ganguly* (India Studies), Russell Lee Hanson*, Jeffrey A. Hart*, Marjorie R. Hershey*, Francis Hoole* (Emeritus), Gregory Kasza* (East Asian Languages and Cultures), Michael Dean McGinnis*, Eugene McGregor* (Public and Environmental Affairs), Patrick O'Meara* (African Studies, Public and Environmental Affairs), James Perry* (Public and Environmental Affairs), Karen A. Rasler*, Leroy Rieselbach* (Emeritus), Jean C. Robinson*, William Scheuerman*, William R. Thompson*, Timothy A. Tilton* (Emeritus), Lois Wise* (Public and Environmental Affairs), Gerald C. Wright Jr.*

Associate Professors

Eileen Braman*, Aurelian Craiutu*, Judith L. Failer*, Lawrence J. Hanks, Robert Hattery (Emeritus), Scott Kennedy* (East Asian Languages and Cultures), Armando Razo*, Regina Smyth*, Abdulkader Sinno*, Dina R. Spechler*

Assistant Professors

Timothy Hellwig*, Yanna Krupnikov*, Lauren Morris MacLean* Beate Sissenich*

Director of Graduate Studies

Professor William Scheuerman*, Woodburn Hall 210, (812) 855-1208

Courses

600 Level
With the exception of individual readings courses, 600-level courses are seminars or colloquia. In some instances a seminar will introduce students broadly to the principal scholarly literature in a field; in others, the objective will be to provide an in-depth analysis of a more specialized area of research. The kinds of seminar topics that are offered regularly are illustrated following.

Seminar topics often have relevance for each of several of the departmental examination fields. Furthermore, a given topic may be approached from a variety of perspectives. Therefore, although cross-listing is avoided here for the sake of brevity, it should be noted that essentially the same topic may appear under each of two or more generic titles at various times.

Interested students should consult detailed course descriptions, which are available on request from the departmental graduate office in advance of each semester. Any course at the 600 level may be taken more than once, provided the topic is not repeated.

700 Level
All 700-level courses are research seminars. Students are expected to demonstrate their own research enterprise on a topic agreed upon with the instructor. In some instances, team research may be carried out. Students are also expected to make significant progress toward identification of an eventual dissertation project in the research seminars in the major field. Each course may be taken more than once.

POLS–Y 304 Constitutional Law (3 cr.)

POLS–Y 311 Democracy and National Security (3 cr.)

POLS–Y 313 Environmental Policy (3 cr.)

POLS–Y 333 Chinese Politics (3 cr.)

POLS–Y 334 Japanese Politics (3 cr.)

POLS–Y 337 Latin American Politics (3 cr.)

POLS–Y 338 African Politics (3 cr.)

POLS–Y 339 Middle Eastern Politics (3 cr.)

POLS–Y 340 East European Politics (3 cr.)

POLS–Y 342 Topics on the Regional Politics of Africa (3 cr.)

POLS–Y 343 The Politics of International Development (3 cr.)

POLS–Y 346 Politics in the Developing World (3 cr.)

POLS–Y 350 European Integration (3 cr.)

POLS–Y 353 The Politics of Gender and Sexuality (3 cr.)

POLS–Y 368 Russian and Soviet Foreign Policy (3 cr.)

POLS–Y 381 Classical Political Thought (3 cr.)

POLS–Y 382 Modern Political Thought (3 cr.)

POLS–Y 383 Foundations of American Political Thought (3 cr.)

POLS–Y 384 Developments in American Political Thought (3 cr.)

POLS–Y 394 Public Policy Analysis (3 cr.)

POLS–Y 550 Political Science and Professional Development (1–3 cr.) Philosophies and techniques of teaching various types of political science courses in different learning environments; factors related to the motivation and performance of students; development of course materials for undergraduate courses; preparing to present papers at conventions and to apply for grants; improving self-presentation skills for job interviews.

POLS–Y 557 Comparative Politics: Approaches and Issues (3 cr.) Overview and analysis of the approaches and issues in the literature of comparative politics. Required of students taking comparative politics as a field of study for the Ph.D. It is recommended that this course

be taken during the first two years of graduate work at Indiana University.

POLS–Y 561 American Politics: Approaches and Issues (3 cr.) Overview and analysis of the approaches and issues in the literature of American politics. Required of students taking American politics as a field of study for the Ph.D. It is recommended that this course be taken during the first two years of graduate work at Indiana University.

POLS–Y 565 Public Administration, Law, and Policy: Approaches and Issues (3 cr.) Overview and analysis of the approaches and issues in the literature of public administration, law, and policy. Required of students taking public administration, law, and policy as a field of study for the Ph.D. It is recommended that this course be taken during the first two years of graduate work at Indiana University.

POLS–Y 569 International Relations: Approaches and Issues (3 cr.) Overview and analysis of the approaches and issues in the literature of international relations. Required of students taking international relations as a field of study for the Ph.D. It is recommended that this course be taken during the first two years of graduate work at Indiana University.

POLS–Y 570 Introduction to the Study of Politics (3 cr.) Problems of graduate study and professional scholarship; central organizing concepts and the use of theory in political science and related disciplines; specialized areas of research and scholarship in political science; conditions of scientific inquiry and methodological problems in the study of political phenomena; central importance of theory in explanation.

POLS–Y 572 Mathematical Tools for Political Scientists (1 cr.) Review of topics in mathematics that are particularly useful in the application of formal political theory and political methodology. Typical topics include Euclidean spaces and functions; sets, neighborhoods, sequences, and limits; derivatives; integrals; vectors and matrices; optimization. To be taken prior to or concurrent with Y573 and Y577.

POLS–Y 573 Introduction to Formal Political Theory (3 cr.) Introduction to the use of formal models in political science. Provides the training required to develop basic models of political process and exposes students to classic works and problems in formal political theory.

POLS–Y 575 Political Data Analysis I (3 cr.) Basic quantitative analysis techniques applied to political science data: principles of measurement, tables, graphs, probability distributions, nonparametric statistics, matrix algebra, Markov chains, correlations and simple regression, tests of significance. Computer processing of data and applications of bivariate statistics to problems in political science emphasized.

POLS–Y 576 Political Data Analysis II (3 cr.) P: Y575 or equivalent. Focuses on general linear model and multivariate statistical techniques such as analysis of variance and covariance, partial and multiple regression and correlation, time series analysis, logit and probit analysis, canonical correlation, and discriminant analysis. Applications to problems in political science research emphasized.

POLS–Y 576 Advanced Topics in Political Data Analysis (3 cr.) P: Y576 or equivalent. Content varies. Topics include analysis of covariance structures, dynamic modeling, estimation of multiple equation systems, mathematical models, time series analysis. Applications to problems in political science research emphasized.

POLS–Y 579 Qualitative Methods in Political Research (3 cr.) P: Y576 or equivalent. This course surveys the use of qualitative methods such as case studies, comparative historical analysis, interviews, focus groups, participant observation, interpretivism, and culture studies. Readings include works about each method as well as concrete research that utilizes each method, and students will also conduct practical exercises such as interviews.

POLS–Y 580 Research Methods in Political Science (1–3 cr.) Foundations of political research; alternative research strategies; problems of measuring political variables; design of research to test hypotheses. S/F grading.

POLS–Y 591 Computer Applications in Political Science (1 cr.) This course introduces students to computing applications for political scientists. Topics include computing packages such as STATA, S-Plus, and Excel; creating datasets; and transferring datasets among programs. A prerequisite for this course is enrollment in Y575.

POLS–Y 592 Bibliography of Political Science (1 cr.) Introduction to library research tools in political science, problems of bibliographical research, special resources of Indiana University, problems of utilizing library resources.

POLS–Y 600 State Politics (1 cr.) An examination of the institutions and processes by which state governments carry out their responsibilities. Includes the study of executives, legislatures, parties, and elections at the state level.

POLS–Y 622 Urban Politics (3 cr.) An examination of—and the problems faced and challenges faced by—the governments of cities and metropolitan areas. Includes study of leadership, citizen participation, intergovernmental relations, and urban policy.

POLS–Y 630 State Executive Politics (3 cr.) A course that examines the role of governors in state politics. Includes the study of leadership and the relationship between the executive and other elements of government at the subnational level. This course is not currently being offered.

POLS–Y 640 State Parties and Interest Groups (3 cr.) An examination of political parties and interest groups, their roles in government, and their structure and organization.This course is not currently being offered.

POLS–Y 657 Comparative Politics (3 cr.) The focus may be on one or more political systems within regions indicated. Illustrative topics: political elites and social stratification, comparative administration and public policy, cross-national analysis, West Europe, East Europe, comparative Communist systems, Russia, Africa, Middle East, Latin America, East Asia, comparative development strategies.

POLS–Y 661 American Politics (3 cr.) Illustrative topics: the presidency, legislative process, political behavior,

political parties and representation, political socialization, comparative state politics, urban politics, bureaucratic politics.

POLS–Y 663 Political and Administrative Development (3 cr.) Illustrative topics: politics of social change, comparative urbanization, political and administrative development.

POLS–Y 665 Public Law and Policy (3 cr.) Illustrative topics: urban policy analysis; politics of higher education; science, technology, and public policy; politics of environmental policy.

POLS–Y 669 International Relations (3 cr.) Illustrative topics: international conflict, international organization, quantitative international relations, analysis and evaluation of policy making, U.S. foreign policy, Russian and Soviet foreign policy, international and comparative communism, international political economy.

POLS–Y 671 Public Administration (3 cr.) Illustrative topics: organization theory, urban administration, public administration.

POLS–Y 673 Empirical Theory and Methodology (3 cr.) Illustrative topics: survey of empirical theory, theory building and causal inference, positive political theory, institutional analysis and design, empirical democratic theory, research design.

POLS–Y 675 Political Philosophy (3 cr.) Illustrative topics: analysis of political concepts; political theory of the Enlightenment; nineteenth-century political thought; welfare state: theory and practice; Marxist theory; American political thought.

POLS–Y 681 Readings in Comparative Politics (1–4 cr.)

POLS–Y 683 Readings in American Politics (1–4 cr.)

POLS–Y 685 Readings in Public Administration, Law, and Policy ((1–4 cr.)

POLS–Y 687 Readings in International Relations (1–4 cr.)

POLS–Y 689 Readings in Political Theory and Methodology (1–4 cr.)

POLS–Y 757 Comparative Politics (3 cr.)

POLS–Y 761 American Politics (3 cr.)

POLS–Y 763 Political and Administrative Development (3 cr.)

POLS–Y 765 Public Law and Policy (3 cr.)

POLS–Y 769 International Relations (3 cr.)

POLS–Y 771 Public Administration (3 cr.)

POLS–Y 773 Empirical Theory and Methodology (3 cr.)

POLS–Y 775 Political Philosophy (3 cr.)

POLS–Y 780 Directed Research in Political Science (1–4 cr.) **These courses are eligible for a deferred grade.

POLS–Y 880 M.A. Thesis (1–4 cr.) **These courses are eligible for a deferred grade.

POLS–Y 890 Ph.D. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

Psychological and Brain Sciences

College of Arts and Sciences
Departmental URL: www.psych.indiana.edu

Departmental E-mail: psych@indiana.edu

Curriculum

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Recommended Undergraduate Background: To prepare for graduate work in psychological and brain sciences at Indiana University, students should have a general background in psychology consisting of approximately 20 credit hours in psychology, including laboratory work in psychology and statistics. Undergraduate course work in mathematics and in the biological and/or physical sciences is desirable. While it is expected that students will have a substantial background in psychology, students with backgrounds in other areas, for example, biology or mathematics, will be considered for admission on an equal basis with those students who have majored in psychology.

Grades

An average of at least a B+ (3.3) must be maintained in all course work. No grades below B– (2.7) may be counted toward degree requirements. Students with a GPA below 3.3 or receiving more than one grade below B– (2.7) may be subject to academic probation and dismissal.

Master of Arts Degree

Normally the department accepts only Ph.D. students, but under unusual circumstances, applicants are considered for a M.A. degree only. Students accepted for a M.A. normally are not provided with financial support by the department. Students completing the M.A. program are not ensured acceptance into the Ph.D. program and will be evaluated in comparison with all other applicants to the Ph.D. program. No training program in clinical psychology is offered at the master's level.

Course Requirements

A total of 30 credit hours including a core consisting of P553 and P595, and one graduate course in each of four areas of specialization in the department. A GPA of at least 3.3 must be maintained (see general department guidelines for grades above).

Master's Thesis

Required. Students must be consistently involved in productive research throughout their course of graduate study. Students who are determined, by their faculty advisory committee, not to be making adequate research progress may be subject to academic probation and dismissal.

Doctor of Philosophy Degree

Research

To remain in good standing, students must be consistently involved in productive research throughout their course of

graduate study. Students are judged on research potential and productivity, as well as on course work. All students are expected to develop research skills appropriate to their programs through a combination of course work, individual study, and experience. One substantial research project must be completed and formally approved by the student's advisory committee before the end of the third semester. A second substantial research project must be completed and approved by the end of the fifth semester. Student research progress will be evaluated annually by the student's advisory and research committees, which will examine progress on first and second research projects, the dissertation research project, and involvement in other research projects. Students who fail to make adequate research progress at any point may be subject to academic probation and dismissal.

Course Requirements

A total of 90 credit hours, including dissertation. Students must complete the department core courses: P595, P660, P553, and a second statistics course. Also required are course selections from the student's area of specialization, usually consisting of approximately 12 credit hours from a selection of core courses in a student's major area of study. Unless pursuing a double major, the student is also required to complete a minor. In addition, students are expected to complete one graduate course in two areas outside the student's specialization and minor areas (or outside both majors, in the case of a double major). Up to two additional courses may be specified by the student's advisory committee at any time before the Qualifying Exam has been successfully passed.

In addition, students completing the APA approved Program in Clinical Psychology must complete two clinical elective courses, at least 6 hours of P690 (practicum training), a one-year internship approved by the clinical science program, and must demonstrate competence in APA specified areas of broad and general training in psychology.

Failure to complete required courses within a timeframe specified by the student's advisory committee may make a student subject to academic probation and dismissal.

Minor

Doctoral students pursuing a single major may choose to minor outside of the department or to take an in-depth minor within the Department of Psychological and Brain Sciences. If a minor outside the department is elected, the requirements are specified by that unit. An in-depth minor within the department consists of 9 credit hours of graduate course work in an area of psychological and brain sciences other than that of the major. The specific courses making up such a minor must be approved by the student's advisory committee. Students pursuing a double major are not required to complete a minor (see General Requirements section of the Graduate Bulletin).

Other Provision

Before being nominated to candidacy, all students are required to take P660 (as noted under "Course Requirements") and lead at least one lab section of P211 (under the supervision of the P211 instructor and gathering end of the semester teaching evaluations; the graduate student does not need to be the instructor of record for the lab section) or obtain equivalent teaching experience as approved by the Director of Graduate Studies or the department chair. The competency of the graduate student's teaching will be evaluated by a faculty member teaching supervisor and if not adequate, the student will be asked to take remedial action, which may include additional training in teaching and an additional teaching assignment.

Qualifying Examination

Written and oral portions of the qualifying exam must be successfully passed by the beginning of the fifth regular semester of residency. Students with a double major may request one additional year before they take the qualifying examination and must successfully pass the exam by the beginning of the seventh regular semester of residency (see General Requirements section of the Graduate Bulletin). Students who do not pass the qualifying exam will be given an opportunity to retake the exam within one semester (i.e., by the end of the fifth semester or for double majors by the end of the seventh semester). Students who do not successfully pass their second attempt at the qualifying examination will be subject to dismissal.

Advisory and Research Committees

Students must identify a major advisor and have an advisor throughout the course of their graduate studies. Student must form an advisory committee by the end of their second semester; later in their course of study, students must form a research (dissertation) committee. The student's committee (advisory or research) shall consult with the student, at least once per year, to help determine the student's course of graduate study, develop a research program, approve the student's course selections, and review the student's progress in all areas (for example, but not limited to: completion of required courses, course grades, adequacy of teaching, and research progress). The student's committee will determine whether or not the student is making adequate progress in all areas. Should the advisory (or research) committee determine that a student is not making adequate progress in any area, this may be grounds for eliminating a student's department funding, probation, or dismissal from the program.

Ph.D. Minor in Psychological and Brain Sciences

Doctoral students in other departments may elect psychological and brain sciences as an outside minor. A minimum of four courses at the graduate level is required. The student must achieve a grade of at least B– in each course and an overall grade point average of at least 3.0. The specific courses must be approved by a faculty advisor who is a faculty member within the Psychological and Brain Sciences department and may include no more than one research course (P895).

Accreditation Status

The Clinical Science Program in the Department of Psychological and Brain Sciences at Indiana University has been accredited continuously since 1948 by the American Psychological Association Committee on Accreditation. For further information on the program's status you may contact: Committee on Accreditation c/o Office of Program Consultation and Accreditation Education Directorate American Psychological Association

750 First Street NE Washington, DC 20002-4242, (202) 336-5979

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Eliot Hearst* (Emeritus), Robert Nosofsky*, Richard M. Shiffrin*

Eleanor Cox Riggs Professor

Aina Puce*

Jack and Linda Gill Chair

Cary Lai*, Kenneth Mackie*

Luther Dana Waterman Professor

Richard M. Shiffrin*

Rudy Professor

Bennett Bertenthal*, James T. Townsend*, Stanley Wasserman*

Chancellors' Professors

James C. Craig*, Robert L. Goldstone*, Robert Nosofsky*, David B. Pisoni*, George V. Rebec*, Steven J. Sherman*, Linda B. Smith*

Distinguished Scholar

William Estes

Professors Emeritus/Emerita

James Allison*, Richard Berry*, Alexander Buchwald*, Jerome Chertkoff*, Gabriel Frommer*, S. Lee Guth*, Kenneth Heller*, Margaret Intons-Peterson*, Richard McFall*, Lloyd Peterson*, Donald Robinson*, Richard Rose*

Associate Professor Emeritus

Harold Lindman*

Professors

Jeffrey R. Alberts*, John E. Bates*, Geoffrey Bingham*, Sharon Brehm*, Jerome R. Busemeyer*, Thomas A. Busey*, Joseph Farley*, Peter Finn*, Preston Evans Garraghty*, Julia R. Heiman*, William Hetrick*, Edward R. Hirt*, Amy Holtzworth-Munroe*, Susan S. Jones*, John K. Kruschke*, Brian F. O'Donnell*, Dale R. Sengelaub*, Eliot R. Smith*, Olaf Sporns*, William D. Timberlake*, Peter Todd*, Richard Viken*, Meredith West*

Associate Professors

Jason M. Gold*, Luiz Pessoa*, Cara L. Wellman*

Assistant Professors

Heather Bradshaw*, Joshua Brown*, Brian D'Onofrio*, Karin Harman James*, Thomas W. James*, Michael Jones*, Sharlene D. Newman*, Anne Prieto*, Robert Rydell*, Chen Yu *

Courses

Courses in the department numbered below P400 are not acceptable as credit toward a graduate degree in psychological and brain sciences. Students in the psychology Ph.D. program may not take a 400-level course for graduate credit if an equivalent higher-level graduate course is available. The following P400 level courses are acceptable as credit toward a graduate degree in psychological and brain sciences, if an equivalent higher-level course is not available.

Undergraduates may, by consent of the instructor, register in and receive credit for graduate courses (number P500 and above). Ordinarily such consent is not granted unless the student has completed 20 credit hours of psychology.

PSY–P 412 Laboratory in Human Performance (3 cr.)

PSY–P 417 Animal Behavior (3 cr.)

PSY–P 421 Laboratory in Social Psychology (3 cr.)

PSY–P 423 Human Neuropsychology (3 cr.)

PSY–P 424 Laboratory in Sensation and Perception (3 cr.)

PSY–P 425 Behavior Disorders of Childhood and Adolescence (3 cr.)

PSY–P 426 Laboratory in Behavioral Neuroscience (3 cr.)

PSY–P 429 Laboratory in Developmental Psychology (3 cr.)

PSY–P 434 Community Psychology (3 cr.)

PSY–P 435 Laboratory in Human Learning and Cognition (3 cr.)

PSY–P 436 Laboratory in Animal Learning and Motivation (3 cr.)

PSY–P 438 Language and Cognition (3 cr.)

PSY–P 459 History and Systems of Psychology (3 cr.)

PSY–P 460 Women: A Psychological Perspective (3 cr.)

PSY–P 500 Psychology for Graduate Students (3 cr.) P: Graduate standing or consent of instructor. Basic psychological principles. For students with little or no previous training in psychology.

PSY–P 501 Research Issues in Clinical Psychology (3 cr.) P: Graduate standing in psychology or consent of instructor. A research-oriented survey of psychopathy, assessment, and psychotherapy. Models of psychological disorder; strategies of etiological research; test construction and clinical prediction; research on process and outcomes of psychotherapy. Credit not given for both P501 and P530.

PSY–P 502 Developmental Psychology (3 cr.) P: Graduate standing in psychology or consent of instructor. An advanced introduction to the theory and experimental analysis of ontogenetic processes. Special emphasis on human development.

PSY–P 503 Complex Cognitive Processes (3 cr.) P: Graduate standing in psychology or consent of

instructor. A survey of topics in human information processing, including attention, short-term storage, long-term retention, retrieval from memory, concept attainment, problem solving, speech perception, and psycholinguistics.

PSY–P 504 Learning and Motivation (3 cr.) P: Graduate standing in psychology or consent of instructor. Introduction to theory and experimental literature in learning and motivation. Focus on nonhuman behavior.

PSY–P 506 Sensory Psychology (3 cr.) P: Graduate standing in psychology or consent of instructor. Introduction to methods and research in sensory psychology.

PSY–P 507 Theories of Learning (3 cr.) Survey, comparison, and critical analysis of modern theories of learning, from Thorndike to present.

PSY–P 510 Principles of Research in Psychology (3 cr.) Principles of construction and testing of psychological theories; experimental and nonexperimental designs; requirements of valid inference; measurement of psychological constructs; research methods including laboratory studies, surveys, observation methods.

PSY–P 514 Methods in Biopsychology (2 cr.) P: K300 or equivalent, course in laboratory psychology. Training in research techniques in sensory and physiological psychology.

PSY–P 517 Methods in the Direct Observation of Behavior (3 cr.) P: P553 or its equivalent. Reviews current use of observational techniques in the study of animal and human behavior, and critically considers the development of coding schemes and strategies of data recording and analysis.

PSY–P 519 Current Theories of Personality (3 cr.) P: Graduate standing, consent of instructor. Original writings of major contemporary theorists of personality.

PSY–P 525 Classical Conditioning (3 cr.) Critical evaluation of experimental literature. Emphasis on methodological and theoretical issues.

PSY–P 526 Neurobiology of Learning and Memory (3 cr.) Comprehensive survey of the cellular and molecular bases of associative and nonassociative forms of learning and memory. Vertebrate and invertebrate model systems and preparations as well as data obtained from the human neuropsychology literature will be studied.

PSY–P 527 Developmental Psychobiology (3 cr.) Ontogeny of sensory-motor behavior and its underlying anatomical and physiological development.

PSY–P 528 Experimental Analysis of Economic Behavior (3 cr.) P: Graduate standing or permission of instructor. Relations between experimental psychology and microeconomics: basic concepts, theory, and research.

PSY–P 530 Clinical Psychology (3 cr.) P: Graduate standing and consent of instructor. Introduction to clinical psychology as an experimental-behavioral science, with an emphasis on theoretical, methodological, and ethical issues basic to clinical research and professional practice.

PSY–P 533 Introduction to Bayesian Data Analysis I (3 cr.) P: Basic calculus (e.g., MATH M212 or equiv.) and computer programming (e.g., CSCI A201 or equivalent). Introduction to Bayesian analysis of data from simple experiment designs using hierarchical models and Monte Carlo methods.

PSY–P 534 Introduction to Bayesian Data Analysis II (3 cr.) P: Basic calculus (e.g., MATH M212 or equiv.) and computer programming (e.g., CSCI A201 or equivalent). Introduction to Bayesian analysis of data from simple experiment designs using hierarchical models and Monte Carlo methods.

PSY–P 536 Theory of Tests and Measurements (3 cr.) P: P553. Survey of test and measurement procedures; classical test theories, statistical theories; models of tests.

PSY–P 540 Principles of Psychological Assessment and Prediction (3 cr.) P: P553-P554 or equivalent. Concepts of validity and reliability. Concepts of validity and reliability. Diagnostic devices viewed as bases for decisions. Classification. Comparison of methods of making predictions about individuals.

PSY–P 546 Neurophysiological Techniques: Theory and Methods (3 cr.) P: Consent of instructor. Covers theory and methods underlying neurophysiological techniques with a particular emphasis on electroencephalography/event-related potentials and transcranial magnetic stimulation. Specific topics include neurophysiological recording principles, stimulus delivery/experimental design, technical issues, basic data acquisition and analysis techniques and interpretation. Some basic principles of neural source modeling will also be covered. This is a 3 cr. methods graduate course designed for graduate students who are pursuing research projects in neuroimaging. Course content is unique. An alternative 3 cr. methods course for graduate students who are pursuing neuroimaging projects is P650 Neuroimaging: Theory and Methods.

PSY–P 553 Advanced Statistics in Psychology I (3 cr.) P: K300 or equivalent. Statistical inference applied to problems in psychological research. Experimental design and data interpretation. Elementary probability theory, statistical distribution, classical and nonparametric tests of hypotheses, point and interval estimation. Relations between statistical models and experimental controls.

PSY–P 554 Advanced Statistics in Psychology II (3 cr.) P: K300 or equivalent. Statistical inference applied to problems in psychological research. Experimental design and data interpretation. Elementary probability theory, statistical distribution, classical and nonparametric tests of hypotheses, point and interval estimation. Relations between statistical models and experimental controls.

PSY–P 557 Representation of Structure in Psychological Data (3 cr.) P: P553 or consent of instructor. Survey of multidimensional scaling, clustering, choice theory, and signal detection approaches to modeling similarity and classification. Theory and application.

PSY–P 564 Psychophysics (3 cr.) P: P553 or consent of instructor. Classical and modern methods for investigation of sensory-perceptual processes. Application of signal detectability theory to psychophysics; emphasis on current

research on detection and recognition of auditory signals in noise.

PSY–P 565 Psychophysics of Vision (3 cr.) P: P553 or consent of instructor. Critical evaluation of research literature on visual functions of brightness, color, and spatial discrimination.

PSY–P 590 Readings in Psychological and Brain Sciences (1–6 cr.) Readings and study in special topics of Psychological and Brain Sciences with guidance from a member, or members, of the faculty.

PSY–P 595 First-Year Research Seminar (2–3 cr.) Presentation and discussion of first-year graduate student research projects.

PSY–P 605 Introduction to Mathematical Psychology (3 cr.) P: P553 or consent of instructor. Current applications of mathematics to psychology.

PSY–P 615 Developmental Psychology I (3 cr.) P: P553 or consent of instructor. An analysis of developmental processes in humans and nonhumans. Emphasis on the study of mechanisms that control the ontogeny of sensory, motor, cognitive, and language systems.

PSY–P 620 Attitudes and Attitude Change (3–3 cr.) P: P320, P511, or consent of instructor. Conceptions of the attitude construct and theories of attitude formation and change.

PSY–P 623 Psychology of Language (3 cr.) Psycholinguistic events, including communicative speech, gestures, and symbolic behavior. Interrelations between linguistic and other psychological processes in individual and social situations.

PSY–P 624 Principles of Psychopathology (3 cr.) P: Graduate standing and consent of instructor. Description of the phenomena of psychopathology and the principles associated with their classification.

PSY–P 625 Operant Conditioning (3 cr.) A survey and interpretation of research findings on problems of systematic interest for a general science of behavior, with emphasis on recent work.

PSY–P 631 Intervention and Evaluation (3 cr.) P: Consent of instructor. A systematic comparison of theories of psychotherapy and behavior change. Introduction to evaluation techniques appropriate to applied settings.

PSY–P 634 Advanced Survey of Community Psychology (3 cr.) P: 15 credit hours of psychology or consent of instructor. A survey of issues and research in community psychology. Topics covered include the role of conceptual models in guiding intervention practices; research in social epidemiology, prevention, consultation, and organizational and community change.

PSY–P 637 Neurobiology of Addictions (3 cr.) P: N500 and N501 and N612 (or permission of instructor). P637 provides students an intensive overview of the fundamentals, state-of-the-art advances, new frontiers, and major gaps in our understanding of the neurobiology of addiction. Applicable to understanding the study of drug/substance and addiction, cellular processes of learning and memory, neuroadaptation, motivation and reward, etc. within neuroscience and psychology.

PSY–P 638 Experimental Psychology of Reading (3 cr.) Examination of the component stages of the reading process. Focuses on how visual information is processed within the framework of information processing and psycholinguistics. Topics to be considered include alphabets, phonetics and phonology, letter recognition, word and sentence processing, cognitive bases of reading, and methods currently employed in teaching reading.

PSY–P 641 Assessment (3 cr.) P: Consent of instructor. Review of research and theory on methods of gathering information about individuals.

PSY–P 644 Attention and Short-Term Memory (3 cr.) Analysis of the experimental literature and theories of human attention and short-term memory, including visual and verbal systems and forgetting.

PSY–P 645 Learning and Long-Term Memory (3 cr.) Analysis of the experimental literature and theories of human learning and long-term memory, including forgetting, organization, sentence memory, and nonverbal memory.

PSY–P 647 Decision Making under Uncertainty (3 cr.) P: P553 or consent of instructor. Detailed survey of decision making under uncertainty. Theories, data, and application of decision making in situations involving imperfect (probabilistic) information; preference and inference in judgment. Applications covered include learning, risky choice, diagnostic decisions, group decisions.

PSY–P 648 Choice Behavior (3 cr.) P: P553 or consent of instructor. Preferential choice under conditions of certainty. Critical review of the properties and limitations of current theories of choice and scaling.

PSY–P 650 Neuroimaging: Theory and Methods (3 cr.) Covers theory and methods of neuroimaging with a particular emphasis on functional MRI. Specific topics include experimental design, data acquisition, data analysis, data interpretation, and data presentation. Also covers introductory MR physics and the physiology of blood oxygen-level dependent (BOLD) changes.

PSY–P 651 Perception/Action (3 cr.) P: Consent of instructor. Coverage includes event perception, optical flow analysis (aperture problem, correspondence problem, structure from motion, sensory psychophysics, contact with machine vision), problems in motor coordination and control (motor equivalence, degrees of freedom problem, contact with physiology of movement and robotics). Focus on the relation between perception and action.

PSY–P 654 Multivariate Analysis (3 cr.) P: P553-P554. Survey of multivariate statistical methods; partial, multiple, and canonical correlation, factor analysis, discriminant analysis, classification procedures, profile analysis, and multivariate analysis of variance.

PSY–P 657 Topical Seminar (arr. cr.) Topics of current interest, with intensive critical examination of appropriate literature. Different staff member in charge each semester.

PSY–P 658 Mathematical Models in Psychology I (4 cr.) P: P605 or consent of instructor. Intensive study of mathematical models employed in experimental psychology: learning, perception, reaction time, social processes. Emphasis on probability methods.

PSY–P 659 Mathematical Models in Psychology II (4 cr.) P: P605 or consent of instructor. Intensive study of mathematical models employed in experimental psychology: learning, perception, reaction time, social processes. Emphasis on probability methods.

PSY–P 660 The Teaching of Psychology (1 cr.) Open to advanced graduate students. Problems of selection, organization, and presentation of psychological knowledge to undergraduates. Emphasis on introductory lecture and laboratory courses.

PSY–P 667 Neuropsychopharmacology (3 cr.) Analysis of neural mechanisms of drug effects on animal and human behavior, based on behavioral and biological experiments.

PSY–P 669 Neurobiology of Behavioral Disorders (3 cr.) P: N500 and N501, and at least one other graduate course in neuroscience or behavioral neuroscience. Neural mechanisms underlying selected neurological and psychological dysfunctions.

PSY–P 686 Current Psychological Literature I (1 cr.) Review of current psychological journals.

PSY–P 687 Current Psychological Literature II (1 cr.) Review of current psychological journals.

PSY–P 690 Practicum in Clinical Psychology (arr. cr.) P: Consent of instructor. Review of current psychological journals.

PSY–P 695 Second-Year Research Seminar (1–2 cr.) Presentation and discussion of second-year graduate student research projects.

PSY–P 700 Research and Theory in Social Psychology (0–2 cr.) P: Consent of instructor. Four semesters required for graduate students in Social Psychology, one for credit. Meets weekly. Invited speakers will sometimes present colloquia. Students taking the course for 1 credit will be required to participate in discussions and readings. For 2 credits, students will be required to make a presentation. Mostly, students will present their own research.

PSY–P 701 Research and Theory in Developmental Science (0–2 cr.) Four semesters required for PhD students in Developmental Psychology. Meets weekly. All students must present at least once a semester. Most will present their own research.

PSY–P 717 Evolutionary Bases of Learning (3 cr.) P: Written consent of instructor. Examines learning as an evolved ability which equips organisms to deal with predictable variability in the environment. Compares ethological, comparative, and general process approaches to the study of learning.

PSY–P 720 Dyadic Interaction (3 cr.) P: P320, P511, or consent of instructor. General models of dyadic interaction; theories and research on affiliation, interpersonal attraction, and the development, maintenance, and dissolution of social relationships.

PSY–P 721 Group Processes (3 cr.) P: P320, P511, or consent of instructor. Theories and research on intergroup processes. Topics will vary but may include social identification, stigmatization, power differentials, group decision making, conformity, minority influence, norms, social dilemmas, intergroup conflict.

PSY–P 736 Child Psychopathology (3 cr.) Seminar on serious behavior disturbances of children. Comparisons with development of normal child interacting with family.

PSY–P 747 Seminar in Cognitive Psychology (1–3 cr.) Selected topics.

PSY–P 820 Social Perception (3 cr.) P: Graduate standing in psychology or consent of instructor. Critical review of theoretical and experimental literature concerning knowledge of others as intervening variable in social behavior.

PSY–P 895 Research (arr. cr.) **These courses are eligible for a deferred grade.

PSY–P 898 Master's Degree Research (arr. cr.) **These courses are eligible for a deferred grade.

PSY–P 899 Ph.D. Degree Research (arr. cr.) **These courses are eligible for a deferred grade.

Public Affairs

School of Public and Environmental Affairs

Departmental E-mail: speainfo@indiana.edu

Note: Be sure to specify the program in which you are interested when sending mail.

Departmental URL: www.spea.indiana.edu/

Curriculum

Degrees Offered

Doctor of Philosophy in Public Affairs; Doctoral Minors in Nonprofit Management, Public Management, Regional Economic Development, and Urban Affairs.

Doctor of Philosophy in Public Affairs

The Doctoral Program in Public Affairs was created to take advantage of the unique strengths of SPEA's interdisciplinary faculty and research programs, both of which have earned wide recognition from peer institutions, national and international agencies, and professional groups. The curriculum equips students with the necessary skills for independent research and analysis of problems, issues, and solutions in government and the nonprofit sector in the following four major fields:

1. Public Finance: the theory and practice of fiscal administration, including public budgeting, revenue administration, and financial management;
2. Public Management: the design and operation of governmental institutions, including strategic/operations management and interrelationships between public and private organizations;
3. Public Policy Analysis: research methods and quantitative techniques for policy analysis, including the content, design, and evaluation of public programs; and

4. Environmental Policy: the study of and contribution to public policies that affect the environment, both domestic and international, including legal, economic, and other policy tools and approaches.

Instead of being grounded in a traditional academic discipline, each of the fields has developed from several theoretical literatures applied to real-world public affairs problems. Although research is grounded in the social sciences, the context of inquiry reverses the normal research process. Instead of beginning with questions originating with discipline-based scholarship, the research process begins with public problems and issues. The research challenge, then, is to match available tools of inquiry to the research opportunities presented by problems.

Admission

Students apply to the School of Public and Environmental Affairs; those accepted are recommended to the University Graduate School for formal admission into the Ph.D. program. Application materials can be found at www.gradapp.indiana.edu/ . Applicants to this program must have completed at least a bachelor's degree. Prospective students are required to submit (1) a statement of purpose, which should be as specific as possible and preferably should refer to potential research mentors by name; (2) official results of the Graduate Record Examinations (GRE); (3) official transcripts of all undergraduate and graduate work completed; and (4) three letters of recommendation. Applicants whose native language is not English must also submit results of the Test of English as a Foreign Language (TOEFL).

Progress Review Committee

Early in the student's program, but in no case later than the third semester in the program, the student must form a progress review committee. The committee consists of four to five members and includes at least one faculty member from each of the student's two chosen major fields of study and also a representative of his or her minor field. The committee members act as mentors and help monitor the selection and fulfillment of program requirements. The chairperson of the committee serves as the student's principal advisor.

Degree Requirements

The Ph.D. in Public Affairs degree requires the completion of at least 90 credit hours in advanced study and research beyond the baccalaureate. Typically, two-thirds of the 90 credit hours are taken in formal course work and one-third in thesis credit. Students completing a Master's in Public Affairs or similar degree may be allowed to transfer some of their graduate course work (30 hours maximum) if approved by their Progress Review Committee, though a prior Master's degree is not required for admission.

Core Requirements

The following three courses are required for all Public Affairs students:

- SPEA-V 680 Research Design and Methods in Public Affairs (3 cr.)
- SPEA-V 621 Seminar in Teaching Public and Environmental Affairs (2 cr.) This course prepares students for college teaching and their professional responsibilities toward current and future students. It is taken in a student's first year in the program.
- SPEA-V 691 Workshop in Public Policy (0 -1 cr.)

Each student is required to take this zero to one-credit-hour course for credit for three semesters. The workshop provides an experiential base that prepares students to critique research in the field, prepare manuscripts for publication, and to defend new ideas and theories. The course meets once a week for 90 minutes.

Research Tool Skills

Required research skills include a two semester quantitative analysis sequence and two additional elective courses or proficiency in a foreign language.

The two-semester quantitative analysis sequence can be fulfilled a number of different ways, including one of the sequences listed as follows:

- SPEA-V 606 Statistics for Research in Public Affairs I (3 cr.) and
- SPEA-V 607 Statistics for Research in Public Affairs II
- BUS-G 651 Economic Methods in Business I (3 cr.) and
- BUS-G 652 Economic Methods in Business II (3 cr.)
- ECON-E 572 Statistical Techniques in Economics II (3 cr.) and
- ECON-E 671 Econometrics I (3 cr.)
- POLS-Y 576 Political Data Analysis II (3 cr.) and
- POLS-Y 577 Advanced Topics in Political Science (3 cr.)
- SOC-S 554 Statistical Techniques in Sociology I (3 cr.) and
- SOC-S 650 Statistical Techniques in Sociology II (3 cr.)

In addition, students must demonstrate either (1) advanced proficiency in quantitative analysis or specialized research skills by completing two additional courses approved by the student's Progress Review Committee, or (2) proficiency in a language appropriate to his/her field of study and approved by the Progressive Review Committee. To qualify as language-proficient, a student must take a language proficiency exam from the appropriate language department at Indiana University.

Major Fields

Students select two of the four SPEA Public Affairs major fields (identified below) to prepare for their qualifying examinations. For each field, the student must complete required courses and approved electives.

The fields and the required courses are:

Public Management—The design and operation of government and not-for-profit institutions, including strategic/operations

management and interrelationships between public, private, and civil society organizations.

Required courses:

- SPEA-V 671 Public Organization and Management I (3 cr.)

- SPEA-V 672 Public Organization and Management II (3 cr.)

Public Finance—The theory and practice of fiscal administration, including public budgeting, revenue administration, and financial management.

Required courses:

- SPEA-V 666 Public Revenue (3 cr.)
- SPEA-V 668 Seminar in Public Budgeting (3 cr.)

Public Policy Analysis—Research methods and quantitative techniques for policy analysis, including the content, design, and evaluation of public programs.

Required courses:

- SPEA-V 664 Seminar in Policy Analysis (3 cr.)
- SPEA-V 673 Public Policy Analysis and Management Science/Operations Research (3 cr.)

Environmental Policy—Economic, law, politics, and implementation of environmental policies in the U.S. and abroad.

Required courses:

Economics:

- SPEA-V 625 Environmental Economics (3 cr.)

Law:

- SPEA-V 645 Environmental Law (3 cr.) or
- LAW-B 783 International Environmental Law (3 cr.)

Policy:

- SPEA-V 710 Topics in Public Policy: Domestic Environmental Policy (3 cr.) or
- SPEA-V 710 Topics in Public Policy: International Environmental Policy (3 cr.)

Minor Field

Students select a minor field according to their research interests. A three-to-four-course sequence is negotiated between the student and the Progress Review Committee, following the requirements of the department or school offering the minor. Among the minor fields chosen by students currently in the program are Economics, Finance, Political Science, Sociology, Geography, Economic Development, and Environmental Science.

Major Junctures

Progress Review Committee

Each student is assigned an advisor on arrival in Bloomington. If the advisor sufficiently reflects a student's research interests, the student can request that the advisor serve as chairperson of the student's Progress Review Committee. The student may also select another professor who is more suited to the student's research interests.

At the end of the first year, the student develops a Progress Review Committee. The committee, in cooperation with the student, defines program objectives, supervises the selection and completion of the minor field, monitors overall progress toward completion of course work requirements, and administers the qualifying exams. Members of the Progress Review Committee should be scholars who know the student's academic record and who are recognized experts in the fields in which the student will stand examination. The committee will consist of four to five members chosen by the student in consultation with the director of the Ph.D. program. At least one member of the Progress Review Committee will be chosen from each of the student's two major fields. It is required that one member of the Progress Review Committee be a non-School professor and represent the outside minor.

Third-Semester Review

During the third semester, each student holds a third semester review meeting with the Progress Review Committee. The purpose of the meeting is to reach an agreement between the student and the committee about the character and status of the student's program. This meeting also serves as a formal evaluation of the student's performance and prospects and includes a presentation of a research paper prepared by the student.

Before the meeting of the Progressive Review Committee, the student develops a Progress Review Statement. The statement needs to include background professional and educational information, course work completed and planned in each concentration and for basic and advanced tool skills, and tentative dates for taking qualifying exams and a discussion of a proposed dissertation topic. Once approved by the committee, the statement serves as a contract for the completion of degree requirements.

In the progress review meeting, the committee members review the student's record of past and planned courses, the likely dissertation topic, and the quality of the research paper and its presentation. The committee determines whether the proposed program of courses will prepare the student for the examinations to be taken at the end of the course work as well as for the dissertation.

The principal objective of the research paper is to allow the faculty to judge whether the student has the ability to complete all requirements for this research-oriented degree in a timely fashion. Thus, of most importance will be that the paper demonstrates the student's ability to carry out reasonably independent research and write the results in a well-reasoned and coherent fashion. The paper should also demonstrate that the student has a good command of the literature in the area and has the ability to use appropriate research methods in carrying out the analysis. It is anticipated that the progress review paper will be a revision of a substantial research paper prepared to fulfill a requirement for a regular course. (The student can, however, submit an entirely new paper to fulfill this requirement.) The paper should be of a quality warranting presentation at a professional society meeting.

Qualifying Examinations

Students are required to sit for qualifying exams in their two major fields. SPEA field exams employ a standard format for all students in a field and are offered at predetermined times each year. Each exam is administered by a team of faculty and organized by an exam coordinator for each field. Students will receive a high pass, pass, qualified pass, or a fail for each of the two exams. Students receiving a qualified pass will eith be asked to re-take portions of the exam, or complete an oral examination. Upon completion of the exam, signatures

of the Committee members and Program Director are required on the Report of Preliminary Examination Committee form. If there is an exam requirement in the minor department, then you must also complete a third exam.

Dissertation
After filing for candidacy status, the doctoral candidate forms a Research Committee consisting of at least four faculty members, including one representative of the candidate's minor field. This committee may be but is not necessarily identical to the Progress Review Committee. The selection of Research Committee members should reflect the dissertation topic and the expertise of the faculty chosen.

The candidate prepares a dissertation proposal to present and defend in a meeting of the Research Committee. The Research Committee reviews the research proposal and requires changes as needed.

Once the dissertation research is completed, the candidate defends the thesis in an open oral examination meeting. The Research Committee is ultimately responsible for determining whether the dissertation is acceptable.

Placement

The Ph.D. Office, the director of the program, and individual faculty work hard to ensure that graduates of the program are placed in academic or research organizations. Although the Public Affairs program has only been operational since 1993, graduates have been very successful recently in obtaining such positions. Recent placements include Syracuse University, Brigham Young University, University of Colorado, Ohio State University, Florida International University, Georgia State University, Iowa State University, the U.S. Department of Labor, National Taipei University, and Yonsei University in South Korea.

Ph.D. Minor in Nonprofit Management(12 credit hours)

Students in a Ph.D. program at Indiana University may select nonprofit management as an outside minor.

The nonprofit management minor enables students to broaden their field of study by enhancing their knowledge of management and governance issues in the nonprofit sector. Students pursuing the minor in nonprofit management are able to develop and address research agendas incorporating questions related to nonprofit organization and their management.

Course Requirements

The doctoral student must secure an advisor from the faculty of the School of Public and Environmental Affairs (SPEA). The faculty advisor will serve as the representative of SPEA in all examinations and other requirements of the student's Ph.D. program that pertain to the minor.

The minor in nonprofit management requires 12 credit hours of courses approved by the advisor. Three of the four courses must be SPEA courses. The additional course may come from SPEA or from any of a variety of disciplines relevant to nonprofit management. Some examples of courses appropriate for the SPEA minor in nonprofit management are listed below.

Special Requirement for 500-level Courses

Students taking a 500-level course (and V602) are required to show that they have completed doctoral-level work in conjunction with the course in order to count the course for the minor. Students must alert the instructor to their doctoral status and request additional/alternative assignments. If the instructor is unwilling to do this, the student should select a different course in conjunction with the candidate's advisor.

A minimum cumulative grade point average of 3.0 (B) must be attained in all courses used for the minor.

Courses

- SPEA-V 521 The Nonprofit and Voluntary Sector (3 cr.)
- SPEA-V 522 Human Resource Management in Nonprofit Organizations (3 cr.)
- SPEA-V 523 Civil Society and Public Policy (3 cr.)
- SPEA-V 524 Civil Society in Comparative Perspective (3 cr.)
- SPEA-V 525 Management in the Nonprofit Sector (3 cr.)
- SPEA-V 526 Financial Management for Nonprofit Organizations (3 cr.)
- SPEA-V 558 Fund Development for Nonprofits (3 cr.)
- SPEA-V 562 Public Program Evaluation (1-3)
- SPEA-V 602 Strategic Management of Public and Nonprofit Organizations (3 cr.)
- SPEA-V 672 Public Organization and Management II (3 cr.)
- SPEA-V 685 Research Seminar in Management (3 cr.)

Ph.D. Minor in Public Management (12 credit hours)

Students in doctoral programs at Indiana University may, with the consent of their advisory committee, select public management as an outside minor.

Requirements

1. The doctoral candidate must secure an advisor from the faculty of the School of Public and Environmental Affairs. The faculty advisor serves as the representative of SPEA in all examinations and other requirements of the student's Ph.D. program that pertain to the minor.
2. The student must take at least 12 credit hours of SPEA graduate-level courses in public management. The choice of courses must be approved by the advisor.
3. A cumulative grade point average of at least 3.0 (B) must be maintained.

Ph.D. Minor in Regional Economic Development (12 credit hours)

The minor field in regional economic development involves study in the topics facing regional planners, developmental specialists, and researchers; and an introduction to the body of knowledge in regional development and urban policy. The study of regional economic development and urban policy broadens students' perspectives, and

students may apply this knowledge to a research agenda that incorporates regional developmental and urban policy questions. The student is expected to have studied both micro- and macroeconomics before beginning the minor program.

Requirements

1. The director of the Institute for Development Strategies serves as minor advisor. The advisor ensures that prerequisites have been met and certifies that the candidate has met the requirements of the minor. An examination may be required at the discretion of the advisor.
2. The candidate must take at least 12 credit hours of approved courses, which must include 2 core courses and 6 credit hours of electives. The core curriculum consists of SPEA-V 622 Urban Economic Development and SPEA-V 669 Economic Development, Globalization, and Entrepreneurship. This course is cross-listed as GEOG-G 817 Seminar in Regional Geography. The elective courses may come from a variety of disciplines, and must be selected in consultation with and approved by the student's minor advisor. One of the two electives may be outside of SPEA.
3. A cumulative grade point average of at least 3.0 (B) must be maintained.

Ph.D. Minor in Urban Affairs (12 credit hours)

Students in doctoral programs at Indiana University may, with the consent of their advisory committee, choose urban affairs as an outside minor. The minor is flexible and is designed by students and their advisors in accordance with students' needs.

Requirements

1. The doctoral candidate must secure an advisor from the faculty of the School of Public and Environmental Affairs. This faculty advisor serves as the school's representative in all examinations or other minor program requirements of the candidate's Ph.D. program. The advisor determines the character of the minor examination (if any), participates in the candidate's oral examinations, and certifies that the candidate has met the requirements of the minor.
2. The candidate must take at least 12 credit hours of graduate-level courses related to urban affairs. The selection of courses must be approved by the candidate's SPEA advisor.
3. A cumulative grade point average of at least 3.0 (B) must be maintained.

Faculty

Dean
John D. Graham

Director

Professor Evan J. Ringquist*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

University President Emeritus

Adam Herbert, John W. Ryan*

Arthur F. Bentley Professor

Elinor S. Ostrom*

Chancellor's Professors

John L. Mikesell*, James L. Perry*

Distinguished Professors

David B. Audretsch*, Ronald A. Hites*

Professors

Robert Agranoff* (Emeritus), Matthew R. Auer*, A. James Barnes*, Wolfgang Bielefeld* (Indianapolis), Lisa Blomgren Bingham*, William R. Black* (Emeritus), Charles Bonser* (Emeritus), Christopher B. Craft*, Jeremy Dunning*, Kirsten A. Grønbjerg*, Hendrick M. Haitjema*, Shiela Suess Kennedy* (Indianapolis), Leslie Lenkowsky*, Greg H. Lindsey* (Indianapolis), Eugene B. McGregor*, David Z. McSwane* (Indianapolis), Debra J. Mesch* (Indianapolis), Theodore K. Miller* (Emeritus), Samuel Nunn* (Indianapolis), Patrick O. O'Meara*, Clinton V. Oster*, John R. Ottensman* (Indianapolis), Roger B. Parks* (Emeritus), James Perry*, Maureen Pirog*, J. C. Randolph*, David A. Reingold*, Rafael Reuveny*, Edwardo L. Rhodes*, Evan Ringquist*, Barry M. Rubin*, Richard S. Rubin* (Emeritus), Adrian Sargeant* (Indianapolis), Roy Shin* (Emeritus), Philip S. Stevens*, Tim A. Tilton* (Emeritus), Jeffrey R. White*, Lois Re-cascino Wise*, Eric Wright* (Indianapolis), Charles Kurt Zorn*

Associate Professors

Terry L. Baumer* (Indianapolis), Crystal A. Garcia* (Indianapolis), Michael Gleeson* (Indianapolis), David Henning Good*, Diane S. Henshel*, Alfred Tat-Kei Ho* (Indianapolis), Ann M. Holmes* (Indianapolis), G. Roger Jarjoura* (Indianapolis), Craig L. Johnson*, Kerry Krutilla*, Yan Yun Zhang (Joyce) Man*, Vicky J. Meretsky*, D. Jeanne Patterson* (Emerita), Flynn W. Picardal*, Kenna F. Quinet* (Indianapolis), Ken R. Richards*, Ingrid M. Ritchie* (Indianapolis), Thomas Stucky (Indianapolis)

Assistant Professors

Alejandro Arrieta (Indianapolis), Sergio Fernandez, Beth A. Gazley, Yong Li (Indianapolis), Deanna Malatesta (Indianapolis), Ashlyn Aiko Nelson, Nicole Quon, Justin Ross, Wenli Yan

Academic Advisor

Professor Evan J. Ringquist*, SPEA 223, (812) 855-0732

Public Policy

College of Arts and Sciences and School of Public and Environmental Affairs

Combined Degree Program

Departmental E-mail: speainfo@indiana.edu

Note: Be sure to specify the program in which you are interested in when sending mail.

Departmental URL: www.spea.indiana.edu/

Curriculum

Degree Offered
Doctor of Philosophy

Special Departmental and School Requirements
(See also general University Graduate School requirements.)

Doctor of Philosophy Degree
The joint Ph.D. Program in Public Policy is a collaborative endeavor of the Department of Political Science and the School of Public and Environmental Affairs (SPEA).

Its emphasis is on the broad field of public policy, concerning the environment of public policy; the processes of policy formation, management, and implementation; and the analysis and evaluation of policy outputs and results. The institutional setting and design of the program offer a unique educational opportunity. Students in the program receive rigorous social science training and gain knowledge of government decision making processes, problem-solving capabilities, and an understanding of the substantive aspects of public problems and their effects on public institutions.

Admission

All applicants to the public policy program are subject to approval by a SPEA-Department of Political Science joint admissions committee. Application materials can be found at www.gradapp.indiana.edu/. Applicants for admission and for financial assistance are required to submit a statement of career goals, official results of the Graduate Record Examination (GRE), official transcripts of all undergraduate and graduate work, and a minimum of three letters of recommendation. Students whose native language is not English must also submit results of the Test of English as a Foreign Language (TOEFL). The Joint Program Committee in Admissions and Financial Aid examines each application closely to determine suitability for the program. The committee looks beyond the formal academic record at the applicant's demonstrated ability to pursue independent study, language and research-skill training, and maturity and experience.

Progress Review Committee

The progress review committee must include at least two faculty members from SPEA and two from the Department of Political Science. Members of the committee who hold joint appointments are considered representatives of their primary unit. The chairperson of the committee serves as the student's principal advisor. Early in the student's program term—generally during the third semester—the committee provides the student with a formal review of the progress made toward the degree.

Degree Requirements
The University Graduate School requires doctoral students to complete 90 hours of graduate credit. Typically, two-thirds of the 90 credit hours are taken in formal course work and one-third in thesis credit. Students holding a Master's in Public Affairs or similar degree may be allowed to transfer some of their graduate course work (30 credit hours maximum) if approved by their Progress Review Committee.

Core Requirements

Public Policy students are required to complete the following courses:

- SPEA-V 680 Research Design and Methods in Public Affairs (3 cr.) or
- POLS-Y 570 Introduction to the Study of Politics (3 cr.)
- SPEA-V 690 Seminar in Public Policy Process (3 cr.) or
- POLS-Y 565 Public Administration, Law, and Policy: Approaches and Issues (3 cr.) This course is offered alternately each fall semester by SPEA (V690) and the Department of Political Science (Y565).
- SPEA-V 691 Workshop in Public Policy (1 cr.) Each student is required to take this 1-credit-hour course for six semesters. The workshop features research presentations by faculty, visiting scholars, and advanced students. It prepares students to critique research in the field, to prepare manuscripts for presentation and publication, and to defend new ideas and theories. There are two sections offered: one by SPEA and the other by the Workshop in Political Theory and Policy Analysis.
- SPEA-V 621 Seminar in Teaching Public and Environmental Affairs (2 cr.) or
- POLS-Y 550 Political Science and Professional Development (1-3 cr.)

These courses prepare students for college teaching and their professional responsibilities toward current and future students. They are taken in a student's first year in the program.

Research Tool Skills

Required course work for research skills includes a basic two-semester statistics sequence and two additional elective courses or proficiency in a foreign language.

Basic Tool Skills

The two-semester quantitative analysis sequence requirement is generally fulfilled through one of the course sequences listed below.

- SPEA-V 606 Statistics for Research in Public Affairs I (3 cr.) and
- SPEA-V 607 Statistics for Research in Public Affairs II (3 cr.)
- POLS-Y 575 Political Data Analysis I (3 cr.) and
- POLS-Y 576 Political Data Analysis II (3 cr.)
- SOC-S 554 Statistical Techniques in Sociology I (3 cr.) and
- SOC-S 650 Statistical Techniques in Sociology II (3 cr.)

Advanced Tool Skills

In addition, students must demonstrate either (1) advanced proficiency in quantitative analysis or specialized research skills by completing two additional courses approved by the student's Progress Review Committee, or (2) proficiency in a language appropriate to his/her field of study approved by the Progress Review Committee. To qualify as language-proficient, a student

must take a language proficiency exam from the appropriate language department at Indiana University.

Fields of Concentration

The School of Public and Environmental Affairs and the Department of Political Science share equally in delivering public policy as the major field of preparation and specialization. Students in the Public Policy Program select two concentration areas—one from SPEA and one from Political Science—in addition to the required concentration in public policy.

The fields of concentration include the following:

SPEA	Political Science
Environmental Policy	American Politics
Policy Analysis	Comparative Politics
Public Management	International Relations
Public Finance	Political Philosophy
	Political Theory and Methodology

Course offerings in SPEA and Political Science help the student prepare for examinations in these fields, and students supplement their coursework with directed readings and research. There is no predetermined set of courses required of all students. Course selection is the responsibility of the student working with his or her Progress Review Committee.

Major Junctures

Progress Review Committee

The Progress Review Committee consists of from four to six faculty members. Two SPEA faculty must be selected for the SPEA concentration and two Political Science faculty for the Political Science concentration. For the shared public policy concentration there must be one SPEA and one Political Science faculty member. One faculty member is chosen by the student to act as the chair of the committee. The chairperson serves as the student's mentor and guides the student through the Progress Review and qualifying examination process.

Before the meeting of the Progressive Review Committee, the student develops a Progress Review Statement. The statement needs to include background professional and educational information, course work completed and planned in each concentration and for basic and advanced tool skills, and tentative dates for taking qualifying exams and a discussion of a proposed dissertation topic. Once approved by the committee, the statement serves as a contract for the completion of degree requirements.

Qualifying Examinations

The Political Science Department gives field exams on a regular basis. SPEA also offers qualifying exams on a regular basis. Typically, exams are offered twice per year. For the public policy exam, each student's exam schedule is negotiated with their exam committee. At their discretion, examiners for all fields may also require an oral examination.

Dissertation

After filing for candidacy status, the doctoral candidate forms a Research Committee consisting of at least four faculty members. Two of the members must be School of Public and Environmental Affairs faculty and two must be from Political Science. This committee may, but will not necessarily, be identical to the Progress Review Committee. The selection of Research Committee members should reflect the dissertation topic and expertise of the faculty chosen.

The candidate prepares a dissertation proposal to present and defend in a meeting of the Research Committee. The Research Committee reviews the research proposal and requires changes as needed.

Once the dissertation research is completed, the candidate defends the thesis in an open oral examination meeting. The Research Committee is ultimately responsible for determining whether the dissertation is acceptable.

Placement

The Ph.D. Office, the director of the program, and individual faculty work hard to ensure that graduates of the program are placed in academic or research organizations. Graduates of the Joint Program in Public Policy have been very successful in obtaining such positions. Recent placements include George Washington University, Emory University, Ohio State University, the University of Arizona, Ulsan University (South Korea), the University of Massachusetts, the U.S. Agency for International Development, and the University of Washington.

Qualifying Exams

After completing the course work for a field, the student is eligible to take the qualifying exam for that field. Joint Ph.D. Program students are required to take the field exam for their Political Science field at the time scheduled by the Department. Field exams in Political Science are usually offered twice a year, and are announced well in advance. SPEA field exams are also standardized and offered at set times, usually twice per year, and are coordinated by an exam coordinator for each field. The joint public policy exam is not standardized, but is instead a personalized exam requiring one examiner from SPEA and one from Political Science. Each student selects his/her examiners, and negotiates with them the set of readings, possible exam questions, and exam dates and format.

Students will receive a high pass, pass, qualified pass, or a fail for each of the three exams. Students receiving a qualified pass will either be asked to re-take portions of the exam, or complete an oral examination. Upon completion of the exam, signatures of the Committee members and the Program Director are required on the Report of Preliminary Examination Committee form.

Faculty

Director

Professor Evan J. Ringquist*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Department of Political Science

See listing under Political Science.

School of Public and Environmental Affairs

See listing under Public Affairs.

Academic Advisor

Professor Evan J. Ringquist*, SPEA 223, (812) 855-0732

Religious Studies

College of Arts and Sciences
Departmental E-mail: religion@indiana.edu

Departmental URL: www.indiana.edu/~relstud

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Graduate Record Examination General Test. In addition, Ph.D. applicants must submit a writing sample. Specific deadlines and expectations are spelled out in the Student Guide, available from the department office and on the department's Web site.

Master of Arts Degree

Grades

B (3.0) average; B or higher for each course.

Course Requirements

A total of 30 credit hours, including R665, at least 2 other 600-level seminars, and 3 credit hours in each of the 3 divisions of the M.A. curriculum (religious traditions in the West, religious traditions in the East, critical issues in religious studies). Students choosing to write a thesis may register for 6 credit hours of R699; those opting for the language study project may register for 6 credit hours of R698. The distribution requirement is satisfied by taking courses in the Department of Religious Studies or cross-listed courses.

Language Work

All M.A. students must demonstrate reading proficiency in a language appropriate to their program of study, to be selected from the following: Arabic, Classical Chinese, French, German, Classical Greek, Hebrew (Biblical, Medieval, or Modern), Hindi, Japanese, Latin, Sanskrit, Spanish, Classical Tibetan. Another relevant language may be chosen with the approval of the director of graduate studies. Students may demonstrate proficiency in French, German, or Spanish by any of the three methods normally sanctioned by the University Graduate School. They may demonstrate proficiency in one of the other languages by successful completion of course work through the intermediate level or by departmental examination.

Thesis/Language Study Project/Examination Option

Students may complete degree requirements in one of three ways: (1) by writing a thesis, (2) by carrying out a language study project, or (3) by passing a comprehensive examination. The thesis option involves 6 credit hours of research and writing in addition to 24 credit hours of course work. A thesis is generally 60–100 pages long and focuses on a theme, problem, and/or historical movement in the study of religion. The language study option involves use of a foreign language in which the primary or significant secondary sources of a religious tradition are written (e.g., Hebrew, Greek, Sanskrit, Chinese). The student must (a) demonstrate competence in the language (normally by passing an examination administered by the department); and (b) prepare a scholarly, annotated translation into English of a religious text written in that language, together with an introduction dealing with its historical and cultural context and significance. Students opting for the comprehensive examination may not take the examination until they have completed 30 credit hours of course work. The examination is in two parts: (a) general field examination, and (b) area examination in the student's field of specialization.

Doctor of Philosophy Degree

Admission Requirements

(1) Completion of an M.A. degree in the study of religion at Indiana University or another recognized institution, (2) a superior record in religious studies, (3) proficiency in one of the required languages, and (4) review and approval by a field committee consisting of faculty in the student's major area of interest.

Grades

No grades below B (3.0) will be counted toward this degree.

Fields of Specialization

A doctoral student specializes in one of the fields of study that have recognized faculty advisory committees (e.g., region, tradition, or methodological approach). Each field has its own specific requirements, including required courses, language skills, and qualifying examination structures and bibliographies, which are determined by the faculty in that field. For the currently available fields of study, their faculty members, and their requirements, see the department's Web site and the Guide for Graduate Students in Religious Studies, which is available from the department office. With the approval of the department's graduate studies committee, a student may combine two fields or declare a special field of study and form an ad-hoc advisory committee for it.

Course and Research Requirements

Doctoral students must earn 90 hours of graduate credit, no more than 30 of which may be transferred from other institutions. The department allows up to 30 hours of M.A. credit toward the doctorate, which means that doctoral students must earn 60 hours of credit beyond the M.A. Up to 30 of the total 90 credit hours may be designated as thesis hours (R699, R799). Thus, students whose 30 M.A. credit hours include 6 hours of thesis credit will earn 36 credit hours of course work and 24 credit hours of thesis at the Ph.D. level.

All doctoral students, regardless of field of specialization, are required to take R665 if they did not do so during an M.A. at Indiana University. All students must take a second thematic, methodological, or cross-cultural

seminar in the department; the director of graduate studies will identify in advance courses that satisfy this requirement. Additional course requirements beyond the M.A. degree include 12 credit hours at the 700 level; R790, a one-credit hour course devoted to the development of teaching skills; and an outside minor (normally 12 credit hours).

Doctoral students are required to produce two research papers prior to taking the qualifying examination. These papers will normally develop out of 700-level seminars, although they may grow out of other research projects as well. Papers should be modeled on a submission to a refereed journal in the student's field of study and should follow that journal's requirements for length and documentation (e.g., Chicago Manual of Style, Turabian, MLA, SBL Handbook of Style). A faculty member must approve each research paper for the student's file, but a student may not secure approval for both papers from the same faculty member. Length is normally 20–25 pages, exclusive of endnotes. An approved research paper may not be a language translation, a bibliographical essay, a text edition, or a set of field notes. Annotated translations may be accepted with the approval of the graduate studies committee.

Language Work

All candidates will be required to show proficiency in two modern languages of scholarship (French and German) and any necessary primary source languages required by their field. Another modern language may be substituted for French or German with the approval of the director of graduate studies and the student's advisors. Proficiency in primary source languages is demonstrated through methods determined by the faculty in the student's field.

Qualifying Examinations

The faculty advisory committee in the student's field sets and supervises the qualifying examination after the student has completed all residency requirements. The exam consists of a total of 12 hours of written exams, which are divided into 3 or more parts, followed by an oral exam, all taken within a 3-week period. The exam is initially taken in its entirety, but it may be retaken once as a whole or in part at the discretion of the faculty committee.

Termination of Enrollment in the Doctoral Program

If a doctoral student falls below a 3.0 (B) grade point average, fails either the written or oral parts of the qualifying examination two times, or otherwise fails to make satisfactory progress toward the degree, the director of graduate studies, in consultation with the student's advisory committee, can initiate steps to terminate the student's enrollment in the program.

Final Examination

Oral defense of dissertation.

Ph.D. Minor in Religious Studies

Students electing the study of religion as an outside minor in a doctoral program will be required to complete 12 credit hours of course work. A maximum of 6 credit hours may be transferred from other institutions or taken from cross-listed courses. At least 6 credit hours are to be taken in the department.

Faculty

Chairperson

Professor David Brakke*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professor

Stephen J. Stein* (Emeritus)

Professors

James Ackerman* (Emeritus), David Brakke*, David L. Haberman*, J. Albert Harrill*, James Hart* (Emeritus), Gerald J. Larson* (Emeritus), Shaul Magid*, Richard B. Miller*, David Smith* (Emeritus), Mary Jo Weaver* (Emerita)

Associate Professors

Candy Gunther Brown*, Constance Furey*, R. Kevin Jaques*, Nancy Levene*, Rebecca Manring*, Aaron Dean Stalnaker*

Assistant Professors

Heather Blair, Sylvester Johnson, Richard Nance

Adjunct Professors

Asma Afsaruddin* (Near Eastern Languages and Cultures), Jamsheed Choksy* (Central Eurasian Studies), Daniel Conkle* (School of Law), Devin DeWeese* (Central Eurasian Studies), Edward Linenthal* (History), Michael Morgan* (Emeritus, Philosophy)

Adjunct Associate Professors

Paul Gutjahr* (English), Herbert Marks* (Comparative Literature), Brian Steensland* (Sociology), Steve Vinson* (Near Eastern Languages and Cultures), Edward Watts* (History)

Adjunct Assistant Professor

Stephen Selka (African American and African Diaspora Studies)

Director of Graduate Studies

Assistant Professor Sylvester Johnson, Sycamore Hall 332, (812) 855-3531

Courses

Methodological Seminars

REL–R 661 Religion and Social Criticism (4 cr.) Track I Seminar. Religion and social practices, with emphasis on religion and rationality, religion and culture, and religion and the self.

REL–R 662 Cross-Cultural Study of Religions (4 cr.) Track II seminar. Historical survey of the development of cross-cultural studies of religious traditions and analysis of the intellectual issues entailed in such studies.

REL–R 663 History of Biblical Interpretation (4 cr.) Track III seminar. Chronological introduction to the most influential works of biblical interpretation, from antiquity to the present. Readings in Jewish, Christian, and esoteric sources will include both commentary and hermeneutic theory.

REL–R 664 Religious Historiography (4 cr.) Track IV seminar. Survey of significant approaches to the history of religious traditions.

REL–R 665 Interpretations of Religion (4 cr.) Major theories and current problems. Required of all departmental graduate students.

REL–R 761 Religion and Social Criticism (3 cr.) Meets concurrently with R661, with additional reading and research assignments.

REL–R 762 Cross-Cultural Study of Religion (4 cr.) Meets concurrently with R662, with additional reading and research assignments.

REL–R 763 History of Biblical Interpretation (4 cr.) Meets concurrently with R663, with additional reading and research assignments.

REL–R 764 Religious Historiography (4 cr.) Meets concurrently with R664, with additional reading and research assignments.

Religious Traditions West

REL–R 511 Religion of Ancient Israel (3 cr.) Survey of scholarship related to specific subfield of ancient Israelite religion.

REL–R 521 Studies in Early Christianity (3 cr.) Study of the New Testament, early Christian history and thought, or the religious milieu of late antiquity, with special attention to issues of methodology and critical scholarship.

REL–R 531 Studies in Christian History (3 cr.) Study of primary and secondary sources in select eras of Western Christian history, such as the medieval, Renaissance, Reformation, and early modern periods.

REL–R 532 Studies of Religion in American Culture (3 cr.) Study of selected topics in the history of religious life and thought in America. May be repeated for credit when topics vary.

REL–R 533 Selected Topics in Modern Christian Thought (3 cr.) Topics on figures and movements: Barth, Berdyaev, Newman, Teilhard de Chardin, Niebuhr, and Tillich; Catholic modernism; Protestant liberalism and neo-orthodoxy; Vatican Council II and its aftermath; developments in Eastern Orthodoxy.

REL–R 535 Studies in Greco-Roman Religion (3 cr.) Study of Greek and Roman religious history and thought, with special attention to issues of methodology and source material. Topics may vary.

REL–R 541 Studies in the Jewish Tradition (3 cr.) Study of various aspects of medieval and modern Jewish literature, religion, and thought.

REL–R 553 Studies in Islam (3 cr.) Selected topics in the history of Muslim society and institutions, sectarian developments, law, theology, mysticism, popular piety, and reform movements in medieval and modern contexts.

REL–R 610 Studies in Biblical Literature and Religion (4 cr.) Issues in the literature, history, and religion of ancient Israel from its origins to the rise of rabbinic Judaism and Christianity.

REL–R 615 The Bible in Literature Courses (4 cr.) The historical-cultural background of the biblical period, literary analysis of the Bible, and analysis of modern literature dependent on the Bible. Designed for teachers of English.

REL–R 620 Ancient and Medieval Christianity (4 cr.) Issues in the history and literature of early Christianity, from its origins through the early medieval period.

REL–R 630 Historical Studies (4 cr.) Development of Western religions in their cultural settings.

REL–R 633 Colloquium in Ancient Religions (4 cr.) Themes and issues in the study of the religions of the ancient Mediterranean and Near East.

REL–R 635 Colloquium on North American Religious History (4 cr.) Examination and discussion of selected historiography in the field of North American religious history.

REL–R 636 Evangelical and Charismatic Christianity in the Americas (4 cr.) Critical readings in the historical emergence and dramatic recent growth of evangelical and charismatic Christianity in the United States, with comparative attention to Canada and Latin America.

REL–R 644 History and Culture in Islam (4 cr.) Selected topics focusing on critical approaches to Islamic historiography, canon formation, modes of religious authority, scriptural and other forms of textual interpretation, epistemology, and theological discourse.

REL–R 652 Colloquium on Religion in the West (4 cr.) P: Consent of instructor. Readings and research on patterns of religious life and thought in the West: continuities, changes, and contemporary issues.

REL–R 714 Studies in Jewish Thought and Culture (4 cr.) An examination of various dimensions of Jewish thought and culture from the Middle Ages to the present. The course will focus on the development of philosophical and theological response to the medieval and/or modern period, paying attention to comparative and cross-cultural questions.

REL–R 733 Advanced Study in Ancient Religions (4 cr.) Meets concurrently with R633, with additional readings in primary languages.

REL–R 736 Advanced Readings in Early Christian Religious Texts (1–4 cr.) Readings in primary language-Greek, Syriac, or other texts from early Christianity. May take the form of a seminar or of individually directed readings.

Religious Traditions East

REL–R 547 Meditation Traditions of India (3 cr.) Survey and analysis of the practice of meditation in Hindu, Buddhist, and Jain traditions of India. Focus on the philosophical and structural basis of meditation and the relation of meditation to the monastic traditions of India. The role of the holy person and importance of the guru-student relationship.

REL–R 551 Religions of South Asia (3 cr.) Study of the major religious traditions of India: Hinduism, Buddhism, Jainism.

REL–R 552 Studies in Buddhism (3 cr.) Topics include the history of Buddhist thought, practice, literature, and institutions. Areas covered regularly include the Prajnaparamita and Ratnakuta literature, lay and monastic roles in Mahayana Buddhism, images of women in Buddhist literature, and aspects of early Buddhist thought.

REL–R 554 Religions of East Asia (3 cr.) Study of historical, interpretive, or philosophical issues in one period, genre, or aspect of an East Asian religion.

REL–R 649 Issues in the Study of Chinese Religions (3 cr.) Introduction to bibliographic materials, research problems, history of the field, and current issues. Includes a condensed overview of Chinese religious history from the earliest records to the present.

REL–R 650 The Hindu Tradition (4 cr.) Selected topics in Hindu religious history: sects, institutions, texts, doctrines, periods.

REL–R 651 South Asian Buddhism (4 cr.) topics in South and Southeast Asian Buddhism from the earliest to the modern period.

REL–R 653 The Confucian Tradition (4 cr.) Selected topics in Confucianism: history, philosophy, literature, authors.

REL–R 654 The Taoist Tradition (4 cr.) Selected topics in the Taoist tradition.

REL–R 655 East Asian Buddhism (4 cr.) Selected topics in the Buddhist traditions of East Asian countries.

REL–R 656 Buddhism in Central Asia (4 cr.) P: Graduate-level background in Buddhism or Central Asian studies or consent of instructor. Issues in the history of Buddhism in Central Asia (Afghanistan, Uzbekistan, Xinjiang) from King Ashoka (third century B.C.E.) to the coming of the Mongols (thirteenth century C.E.).

REL–R 657 Religion in Japan (4 cr.) Selected topics in Japanese religious history.

REL–R 658 Materials and Methods in Buddhist Studies (4 cr.) Introduction to bibliographic materials, research methods, and current issues in the field of Buddhist studies. Includes a condensed overview of the history of Buddhism from its origins to the present.

REL–R 659 Religion and Society in Asia (4 cr.) Selected topics in the interaction between religion and society in Asian countries.

REL–R 749 Issues in the Study of Chinese Religions (4 cr.) Meets concurrently with R649. In addition, students will carry out research on appropriate Chinese materials in consultation with instructor.

REL–R 750 Advanced Readings in Asian Religious Texts (1–4 cr.) Readings in primary-language Chinese, Japanese, Mongolian, Pali, Sanskrit, Tibetan, or other texts. May take the form of a seminar or of individually directed readings.

Critical Issues in Religious Studies

REL–R 561 Social-Scientific Approaches to Religion (3 cr.) Study of various social-scientific disciplines (psychology, sociology, anthropology) as their methods and theories inform our understanding of religious phenomena.

REL–R 563 Religion in Literature (3 cr.) Study of religious issues raised in literary works.

REL–R 571 Studies in Religious Ethics (3 cr.) Selected readings in religious thought and morality.

REL–R 574 From Christian Ethics to Social Criticism I (3 cr.) Christian ethics from the early modern period through the twentieth century, followed by the emergence of comparative religious ethics. Readings include biblical sources and early Christian teachings, the patristic period, Augustine, Bernard of Clairvaux, Aquinas, Luther, Calvin, radical reformers, and Enlightenment Christianity.

REL–R 755 From Christian Ethics to Social Criticism II (3 cr.) Christian ethics from the early modern period through the twentieth century, followed by the emergence of comparative religious ethics. Readings include Edwards, Schleiermacher, Kierkegaard, Barth, modern Catholics and Protestants, and various contributors to the rise of religious ethics and social criticism.

REL–R 581 Philosophical Approaches to Religion (3 cr.) Study of selected philosophers, philosophical movements, or philosophical themes as they relate to religious studies or theology.

REL–R 604 Seminar in Cross-Cultural Philosophy of Religion (3 cr.) Critical analysis of issues in the philosophy of religion in comparative perspective. The manner in which philosophical issues are framed in Indian, European, Chinese-Japanese, and Middle Eastern thought. Attention to the critique of Orientalism and critical theory in recent comparative philosophy.

REL–R 670 History of Religious Ethics (3 cr.) Readings of major ethical texts in key periods. Topics vary according to major religious traditions.

REL–R 672 Religious Thought and Ethics (3 cr.) Key figures, issues, and movements.

REL–R 673 Religion and Violence (4 cr.) Topics course on the relation between religious belief and practice and violence. Readings draw from ethics, history, and social theory. Topics include peace traditions; just-war tradition; religious sacrifice; and cultural order.

REL–R 674 Ethics and Ethos (4 cr.) Exploration of the relation between ethics and ethos; that is, between human agency and the social, political, and religious conditions in which that agency is exercised. Introduction to currents in moral theory presupposed in subsequent ethics courses.

REL–R 675 Feminist Perspectives on Religious Traditions (4 cr.) Topics course that includes a focus on one or more of the following: goddess traditions; Western or Eastern feminist theology; comparative feminist theology; feminist encounters with American religions; recovering women's contributions to Eastern or Western religions.

REL–R 680 Religion and the Problems of Modernity (4 cr.) Topics course on problems posed to religion

by recent developments; e.g., disbelief, pluralism, secularization, technology, rapid socioeconomic and political change, class conflict, historical consciousness.

Other

REL–R 590 Directed Readings in Religious Studies (1–6 cr.)

REL–R 600 Methods in Religious Studies (4 cr.) Seminar in methodology; e.g., historiography, interpretation theory, ethnography in the study of religion.

REL–R 601 Historical Interactions of Religion (4 cr.) Study of secondary and primary literature (in translation) on interaction between two or more religious cultures.

REL–R 602 Cross-Cultural Topics (4 cr.) Study of selected myths, rituals, institutions, or doctrines, in different cultural settings.

REL–R 603 Seminar in Comparative Mysticism (4 cr.) Critical and comparative analysis of selected mystical traditions from India, Europe, China-Japan, and the Middle East. Typologies of mysticism will be studied together with an attempt to formulate a critical definition of "mysticism."

REL–R 638 Religious Dissent (4 cr.) Selected topics in the study of dissenting religious traditions.

REL–R 660 Religion and Culture (4 cr.) Religious dimensions of cultural phenomena.

REL–R 698 Master's Research Project (3–6 cr.) **These courses are eligible for a deferred grade. Study of religious texts.

REL–R 699 Thesis (M.A.) (1–6 cr.) **These courses are eligible for a deferred grade.

Doctoral

REL–R 711 Religion and Scripture (3 cr.) Selected topics on the nature, function, and interpretation of scripture, both oral and written, within specific religious traditions or in cross-cultural perspective.

REL–R 713 Historical Studies in Western Religions (4 cr.) Selected topics in the histories of Judaism, Christianity, or Islam in the ancient and medieval periods, with study of primary sources in the original language(s).

REL–R 735 North American Religions (4 cr.) Research on selected topics.

REL–R 738 Modern Religious History (4 cr.) An investigation of developments in religion in the modern period (mid-seventeenth century to the present) in a variety of religious and cultural settings. Topics include Catholicism and modernity; modern Protestant Christianity; religious development in China, India, or Japan in the postcolonial period.

REL–R 744 Women and Religion (4 cr.) Research seminar on selected topics from ancient, medieval, or modern period in any religious traditions, or in comparative religious traditions.

REL–R 770 Social Ethics (4 cr.) Research seminar on selected topics, including subtraditions in religion, historical developments in a religious tradition, comparative religious ethics, medical ethics.

REL–R 780 Topics in Religious Philosophy (4 cr.) A focus on selected authors (e.g., Plotinus, Augustine, Husserl, Patanjali, Shankara, Chu Hsi) and/or philosophical movements (e.g., German idealism, existentialism, phenomenology, yoga, Madhyamika Buddhism, Vedanta) that are formative for religious or theological thought.

REL–R 790 Departmental Teaching Practicum (1 cr.) Preparation of syllabus, bibliography, assignments, and exams for undergraduate religion courses.

REL–R 791 Advanced Critical and Ethical Study (1–4 cr.) Individually directed reading and research for doctoral students in critical and ethical problems in religion.

REL–R 792 Advanced Cross-Cultural Study (1–4 cr.) Individually directed reading and research for doctoral students in cross-cultural study of religions.

REL–R 793 Advanced Biblical Study (1–4 cr.) Individually directed reading and research for doctoral students in biblical interpretation.

REL–R 794 Advanced Historical Study (1–4 cr.) Individually directed reading and research for doctoral students in historical study of religious traditions.

REL–R 799 Ph.D. Thesis (1–30 cr.)

Cross Listed

INST–I 580 Women in South Asian Religious Traditions (3 cr.) An historical view of the officially sanctioned roles for women in several religious traditions in South Asia, and women's efforts to become agents and participants in the religious expressions of their own lives.

Renaissance Studies

College of Arts and Sciences

Departmental E-mail: msalabr@indiana.edu

Departmental URL: www.indiana.edu/~rena/

Curriculum

Graduate Area Certificate in Renaissance Studies

Renaissance Studies offers an area certificate, which enables doctoral students to investigate Renaissance civilization more extensively than in the Ph.D minor program.

Course Requirements

Nine courses in the Renaissance period: R501, R502, two courses outside the home department, and five courses in any other department. The selection of courses not in the student's major department should be made in consultation with the chairperson of the Renaissance Studies Committee. A minimum of a B (3.0) in all courses that count toward the certificate.

Examination

None

Ph.D. Minor in Renaissance Studies

Course Requirements

Four courses in the Renaissance period: R501, R502, and two additional courses in any department. The selection of courses should be made in consultation with

the chairperson of the Renaissance Studies Committee. Students should also seek approval for the minor from their respective departments. A minimum of a B (3.0) in all courses that count toward the minor.

Examination

None

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Judith Anderson* (English); Marco Arnaudo* (French and Italian); Domenico Bertoloni Meli* (History and Philosophy of Science); J. Peter Burkholder* (Musicology); Ann Carmichael* (History); Linda Charnes* (English); Andrea Ciccarelli* (French and Italian); Stephen Conrad* (Law); Amy Cook* (Theatre and Drama); Arthur Field* (History); Robert Fulk* (English); Constance Furey* (Religious Studies); Adelheid Gealt* (History of Art); Olga Impey* (Spanish and Portuguese); Patricia Ingham* (English); Hildegard H. Keller* (Germanic Studies); Catherine Larson* (Spanish and Portuguese); Nancy Levene* (Religious Studies); Joan Pong Linton* (English); Karma Lochrie* (English); Kathleen Myers* (Spanish and Portuguese); William Newman* (History and Philosophy of Science); Timothy W. O'Connor* (Philosophy); Massimo Ossi* (Musicology); Bret Rothstein* (History of Art); Kathleen Rowold* (Apparel Merchandising and Interior Design); Massimo Scalabrini* (French and Italian); Robert Schneider* (History); Paul Spade* (Philosophy); Rebecca Spang* (History); H. Wayne Storey* (French and Italian); Steven Wagschal* (Spanish and Portuguese); Geivanni Zanovello* (Musicology); David Zaret* (Sociology)

Courses

REN–R 501 The Culture of the Renaissance (4 cr.) A cross-cultural course that examines the European Renaissance as a whole.

REN–R 502 Topics in Renaissance Civilization (4 cr.) A cross-cultural course in which specific topics, problems, and themes are analyzed in the context of the European Renaissance as a whole. May be repeated.

REN–R 503 Independent Projects in Renaissance (3–4 cr.) Independent projects on Renaissance topics for advanced research to be chosen in consultation with the chairperson of the Renaissance Studies Committee.

Russian and East European Institute

College of Arts and Sciences

Departmental E-mail: reei@indiana.edu

Departmental URL: www.indiana.edu/~reeiweb

Curriculum

Degree Programs

The Russian and East European Institute (REEI) offers a Master of Arts program in Russian and East European studies and four dual degree programs: a Master of Arts and Master of Business Administration with the Kelley School of Business, a Master of Arts and Master of Library Science or Master of Information Science with the School of Library and Information Science, and a Master of Arts and Master of Public Affairs with the School of Public and Environmental Affairs. The Russian and East European Institute master's program gives students a broad understanding of the geographical area and its peoples while providing the opportunity to examine in depth the aspect of Russian and East European studies that most interests them. The dual degrees add high-level professional training. Students may focus on the study of Russia, another country or region of the former Soviet Union, or East Central or Southeastern Europe. Within their chosen geographic area, students may concentrate on the study of a particular discipline (business, history, library science, information science, political science, literature, public affairs, or some other) while also taking courses outside of that discipline. REEI also offers a Graduate Certificate Program and a Ph.D. Minor Program.

Master of Arts Degree

The REEI master's degree program is intended to prepare area specialists for nonacademic careers in government and private-sector fields such as research and foreign aid, or in exchange organizations, journalism, and business. Students may also choose to follow the REEI degree with advanced graduate studies. The program normally takes two years to complete. Its aim is to provide a broad interdisciplinary introduction to the Russian and East European area, with language competency appropriate for professional research.

Admission Requirements

Bachelor's degree with evidence of superior ability and completion of the Graduate Record Examination. Students who intend to specialize in East Central, European, Southeast European, or Central Asian studies do not need previous study in languages of those areas for admission. For work in Russian area studies, proficiency in Russian language equivalent to two years of college study is required.

Course Requirements

Thirty (30) credit hours of graduate course work to be distributed as follows: (1) R600 Proseminar in Russian and East European Area Studies (3 credits) to be taken the first fall semester of enrollment; (2) four courses (3 credits each) from area studies offerings, one each from the social science group, historical/geographical group, sociocultural group, and literature group; (3) four courses (3 credits each) in the area of concentration. The concentration can be disciplinary (e.g., comparative politics, or business and economics); or it can be geographic (e.g., East Central Europe or Russia); and (4) REEI R601 Interdisciplinary Colloquium in Russian and East European Studies (3 credits). All course requirements must be completed with an average grade of B or above.

M.A. Essay and Interdisciplinary Oral Examination

The paper by a student in the Interdisciplinary Colloquium in Russian and East European Studies (R601) usually becomes the M.A. essay. The essay must be interdisciplinary in focus and use research in the language of concentration as a defining element. In other words, the foreign language sources must form part of the foundation

on which the argument of the essay rests. Three REEI faculty members evaluate the essay and administer an oral examination that explores the interdisciplinary implications of the essay within the context of the student's graduate course work. The essay should not exceed 13,000 words in length (not counting footnotes/endnotes, bibliography, or tabular material).

Language Requirement

Successful completion of the Russian and East European Oral Proficiency Examination requires a knowledge of Russian at intermediate to high level or knowledge of another area language at the second-year level. Language courses do not count toward the REEI degree requirements, but may be necessary to ensure proficiency.

The REEI Oral Proficiency Examination in Russian takes approximately 60 minutes and requires that the student demonstrate fourth-year (intermediate high) proficiency by (1) participating in an oral interview with the examiner (10–25 minutes) and (2) orally translating a passage from an article (150 words) into English. For the translation section of the exam, the student will be given 15 minutes to prepare the passage and may use a dictionary.

The REEI Oral Proficiency Examination in other area languages takes approximately 30 minutes and requires that the student demonstrate second-year (intermediate) proficiency by (1) carrying on a conversation on everyday topics in the language; (2) presenting a brief talk (five minutes) on a subject in the student's field and answering questions on the subject matter presented; and (3) orally translating a passage from an article (75 words) into English. For the translation section of the exam, the student will be given 15 minutes to prepare the passage and may use a dictionary.

Dual Degree Programs

Dual Master of Arts in Russian and East European Studies and Master of Business Administration (M.A./M.B.A.)

The Russian and East European Institute and the Kelley School of Business jointly offer a three-year program that qualifies students for a dual master's degree. Study for the dual degree (M.A./M.B.A.) can be combined for a total of 66 credit hours rather than the 84 credit hours required for the two degrees taken separately. All dual-degree students should expect to pay University Graduate School tuition rates for approximately half of their enrolled semesters at IU and professional school tuition rates for the other half. Both degrees must be awarded simultaneously.

Admission Requirements

Same as for the Master of Arts degree except that application must also be made to the Kelley School of Business for study toward the Master of Business Administration degree. Students must be accepted by both units in order to be admitted to the program.

REEI Course Requirements

Twenty-four (24) credit hours of graduate course work to be distributed as follows: (1) R600 Proseminar in Russian and East European Area Studies (3 credits) to be taken the first fall semester of enrollment; (2) four courses (3 credits each) from area studies offerings, one each from the social science group, historical/geographical group, sociocultural group, and literature group; (3) two courses (3 credits each) in the concentration area of international business management. These courses should be selected in consultation with the REEI graduate advisor; (4) R601 Interdisciplinary Colloquium in Russian and East European Studies (3 credits).

Business Course Requirements

Forty-two (42) credit hours of graduate courses. Full information on the M.B.A. curriculum is contained in the Kelley School of Business Bulletin.

M.A./M.B.A. Essay and Interdisciplinary Oral Examination

Same as for the Master of Arts degree, except the M.A. essay committee should consist of REEI and Kelley School of Business professors.

Language Requirements

Successful completion of REEI Oral Proficiency Examination in one area language (same as for the Master of Arts degree—please see previous description).

Dual Master of Arts in Russian and East European Studies and Master of Information Science (M.A./M.I.S.)

The Russian and East European Institute and the School of Library and Information Science jointly offer a three-year program that qualifies students for a dual master's degree. Study for the dual degree (M.A./M.I.S.) can be combined for a total of 60 credit hours rather than the 72 credit hours required for the two degrees taken separately. All dual-degree students should expect to pay University Graduate School tuition rates for approximately half of their enrolled semesters at IU and professional school tuition rates for the other half. Both degrees must be awarded simultaneously.

Admissions Requirements

Same as for the Master of Arts degree, except that application must also be made to the School of Library and Information Science for study toward the Master of Information Science degree. Students must be accepted by both units to be admitted to the program.

REEI Course Requirements

Twenty-four credit hours of graduate course work to be distributed as follows: (1) R600 Proseminar in Russian and East European Area Studies (3 credits) to be taken the first fall of enrollment; (2) four courses (3 credits each) from area studies offerings, one each from the social science group, historical/geographical group, sociocultural group, and literature group; (3) R620 Topics in Information, Literature, and Bibliography: Slavic Library Materials or R610 Seminar in International Librarianship: International Information Issues (either R620 or R610 should include a web-based bibliography project.); (4) L596 Internship in Library and Information Science, (research must be conducted in an area pertinent to REEI); and (5) R601 Interdisciplinary Colloquium in Russian and East European Studies (3 credits).

Library and Information Science Course Requirements

Thirty-six (36) credit hours of graduate course work. Full information on the M.I.S. curriculum is contained in the School of Library and Information Science Bulletin.

M.A./M.I.S. Essay and Interdisciplinary Oral Examination

Same as for the Master of Arts degree, except M.A. essay committee should consist of REEI and School of Library and Information Science professors.

Language Requirement

Successful completion of the REEI Oral Proficiency Examination in one area language (same as for the Master of Arts degree—please see previous description).

Dual Master of Arts in Russian and East European Studies and Master of Library Science Degree (M.A./M.L.S.)

The Russian and East European Institute and the School of Library and Information Science jointly offer a three-year program that qualifies students for a dual master's degree. Study for the dual degree (M.A./M.L.S.) can be combined for a total of 54 credit hours rather than the 66 credit hours required for the two degrees taken separately. All dual degree students should expect to pay University Graduate School tuition rates for approximately half of their enrolled semesters at IU and professional school tuition rates for the other half. Both degrees must be awarded simultaneously.

Admissions Requirements

Same as for the Master of Arts degree, except that application must also be made to the School of Library and Information Science for study toward the Master of Library Science degree. Students must be accepted by both units in order to be admitted to the program.

REEI Course Requirements

Twenty-four (24) credit hours of graduate course work to be distributed as follows: (1) R600 Proseminar in Russian and East European Area Studies (3 credits) to be taken the first fall semester of enrollment; (2) four courses (3 credits each) from area studies offerings, one each from the social science group, historical/geographical group, sociocultural group, and literature group; (3) L596 Internship in Library and Information Science; research must be conducted in an area pertinent to REEI; (4) R620 Topics in Information, Literature, and Bibliography: Slavic Library Materials; and (5) R601 Interdisciplinary Colloquium in Russian and East European Studies (3 credits).

Library and Information Science Course Requirements

Thirty (30) credit hours of graduate course work. Full information on the M.L.S. curriculum is contained in the School of Library and Information Science Bulletin.

M.A./M.L.S. Essay and Interdisciplinary Oral Examination

Same as for the Master of Arts degree, except M.A. essay committee should consist of REEI and School of Library and Information Science professors.

Language Requirement

Successful completion of the Russian and East European Institute Oral Proficiency Examination in one area language (same as for the Master of Arts degree—please see previous description).

Dual Master of Arts in Russian and East European Studies and Master of Public Affairs (M.A./M.P.A.)

The Russian and East European Institute and the School of Public and Environmental Affairs jointly offer a three-year program that qualifies students for a dual master's degree. Study for the dual degree (M.A./M.P.A.) can be combined for a total of 60 credit hours rather than the 78 credit hours required for the two degrees taken separately. The first semester of course work toward the dual degree should be completed in the School of Public and Environmental Affairs to complete prerequisite courses that are offered only in the fall. All dual-degree students should expect to pay University Graduate School tuition rates for approximately half of their enrolled semesters at IU and professional school tuition rates for the other half. Both degrees must be awarded simultaneously.

Admissions Requirements

Same as for the Master of Arts degree, except that application must also be made to the School of Public and Environmental Affairs for study toward the Master of Public Affairs degree. Students must be accepted by both units to be admitted to the program.

REEI Course Requirements

Twenty-four (24) credit hours of graduate course work to be distributed as follows: (1) R600 Proseminar in Russian and East European Area Studies (3 credits); (2) four courses (3 credits each) from area studies offerings, one each from the social science group, historical/geographical group, sociocultural group, and literature group; (3) two courses (3 credits each) in the concentration area of public and environmental affairs (these courses should be selected in consultation with the REEI graduate advisor and they may not count toward the credit hours required for the Master of Public Affairs); and (4) R601 Interdisciplinary Colloquium in Russian and East European Studies (3 credits).

Public and Environmental Affairs Course Requirements

Thirty-six (36) credit hours of graduate course work. Full information on the M.P.A. curriculum is contained in the School of Public and Environmental Affairs Bulletin.

M.A./M.P.A. Essay and Interdisciplinary Oral Examination

Same as for the Master of Arts degree, except M.A. essay committee should consist of REEI and School of Public and Environmental Affairs professors.

Language Requirements

Successful completion of REEI Oral Proficiency Examination in one area language (same as for the Master of Arts degree—please see previous description).

Dual Master of Arts in Russian and East European Studies and Master of Public Health (M.A./M.P.H.)

The Russian and East European Institute and the School of Health Physical Education and Recreation (HPER) jointly offer a three-year program that qualifies students for a dual Master's degree. Study for the dual degree (M.A./M.P.H.) can be combined for a total of 56 credit hours instead of the 70 credit hours required for the two degrees taken separately. All dual-degree students should expect to pay graduate tuition rates for approximately half of their enrolled semester at IU and professional school tuition rates for for the other half. Both degrees must be awarded simultaneously.

Admissions Requirements

Requirements are the same as for the Master of Arts degree except that students must also apply to the Master's program of the School of Health Physical Education and Recreation (HPER) and meet its established M.P.H. admissions criteria. Students must be accepted for admissions to both units in order to be admitted to the program.

REEI Course Requirements

Required are twenty-seven (27) credit hours of graduate course work to be distributed as follows: (1) R600 Proseminar in Russian and East European Area Studies (3 credits); (2) four courses (3 credits each) from area studies offerings, one each from the social science group, historical/geographical group, sociocultural group, and literature group; (3) 9 credits in the area of concentration, as described below; and (4) R601 Intedisciplinary Colloquium in Russian and East European Studies (3 credits).

HPER/REE Concentration

The 9 credits of the HPER/REE area of concentration, referenced above, will be distributed as follows: (1) HPER-T590, Introduction to Research in HPER; (2) HPER-T641, Readings in Public Health; and (3) HPER-T640 Research in Public Health. The student is expected to have a Russian and East Europen focus in these courses. These courses will count towards both the REEI and the HPER portion of the degree.

Health Physical Education and Recreation Course Requirements

Thirty-eight (38) credit hours of graduate course work are required, including the 9 credits in the HPER/REE area of concentration, referenced above. Full information on the M.P.H. curriculum is contained in the School of Health Physical Education and Recreation Bulletin.

M.A./M.P.H. Essay and Interdisciplinary Oral Exam

Requirements are the same as for the Master of Arts degree, except the M.A. essay committee should consist of REEI and School of Health Physical Education and Recreation professors.

Language Requirements

Successful completion of REEI Oral Proficiency Examination in one area language (same as for the Master of Arts degree—please see previous description).

Graduate Certificate in Russian and East European Studies

Admissions Requirements

Bachelor's degree with evidence of superior ability. Students admitted to the institute must be admitted first by a department or professional school, in which they will work simultaneously for an advanced degree (M.A. or Ph.D.); the certificate is awarded only upon completion of this degree, except in the case of students who have already earned an advanced degree at Indiana University and who wish to add area specialization to competence in their discipline.

Course Requirements

(1) Six to eight courses (18 to 24 credit hours) with at least one course from three of the four following groups: social science group, historical/geographical group, sociocultural group, and literature group. No more than three courses (9 credit hours) applied toward the certificate may be taken within the student's home department. (2) One colloquium or seminar (600 level or higher) in a department outside the student's own. The courses must be planned in consultation with the graduate advisor or director of REEI.

Language Requirement

Successful completion of REEI Oral Proficiency Examination in one area language (same as for the Master of Arts degree—please see previous description).

Thesis/Dissertation

Students must present to the institute a bound copy of the dissertation/thesis for their home department on a Russian or East European area topic, or, in certain cases, a copy of a paper written for the colloquium/seminar.

Ph.D. Minor Program

Admissions Requirement

Bachelor's degree with evidence of superior ability. Students admitted to the institute must be admitted first by a department in which they will work simultaneously for a Ph.D.; the minor is awarded only upon completion of this degree, except in the case of students who have already earned an advanced degree at Indiana University and who wish to add area specialization to competence in their discipline.

Course Requirements

Three to five courses (3 credits each) from area studies courses, with at least one course from three of the four following groups: social science group, historical/geographical group, sociocultural group, and literature group. The courses must be planned in consultation with the graduate advisor or director of REEI.

Courses

Institute Colloquiums

R500 Russian and East European Issues (1-4 cr.) Selected issues in Russian and East European history, politics, culture, economics, and society.

R575 Graduate Readings in Russian and East European Studies (1-3 cr.) Consent of instructor and

the director of the Russian and East European Institute required.

R600 Proseminar in Russian and East European Area Studies (3 cr.) Introduction to the disciplines and methodologies of Russian and East European area studies.

R601 Interdisciplinary Colloquium in Russian and East European Studies (1.5-3 cr.) Capstone course for the Russian and East European Institute master's degree, emphasizing readings in current problems and completion of a major research paper.

R610 Seminar in International Librarianship: International Information Issues (3 cr.) Comparison of information policies, information standards, and library systems as they affect commercial, scholarly, scientific, and political information contexts.

R620 Topics in Information, Literature, and Bibliography: Slavic Library Materials (3 cr.) P: Knowledge of at least one Slavic language or consent of instructor. Selection and acquisition of Slavic materials; special problems in organization and handling; Slavic bibliographies and other reference materials; online bibliographic databases.

Courses Satisfying Distribution Requirements for the REEI M.A., M.A./M.B.A., M.A./M.I.S., M.A./M.L.S., M.A./M.P.A., Graduate Certificate, and Ph.D. Minor

To receive graduate credit for 300- and 400-level courses, the course must be taught by a professor (not an Associate Instructor) and may require additional assignments. Courses listed in more than one section have varying topics.

Group I (Social Science)

Business

D503 International Business Environment(1.5 cr.)

D504 Operations of International Business (1.5 cr.)

D594 International Competitive Strategy (1.5 cr.)

D595 International Management (1.5 cr.)

M594 Global Marketing Management (3 cr.)

F570 International Financial Markets (1.5 cr.)

F571 International Corporate Finance (1.5 cr.)

X575 Kelley International Finance Perspectives Field Study

X699 International Business and Culture (3 cr.)

Central Eurasian Studies

R502 Finland in the Twentieth Century (3 cr.)

R515 Politics and Society in Central Asian (3 cr.)

R549 Topics in Hungarian Studies (3 cr.)

R589 Topics in Turkish Studies: Social Science Topics (3 cr.)

R693 Theorizing Central Eurasia: The Problems of Nationalism (3 cr.)

R697 Soviet and Post-Soviet Nationality Policies and Problems (3 cr.)

R594 Environmental Problems and Social Constraints in Northern and Central Eurasia (3 cr.)

R790 Seminar in Central Eurasian Studies: Social Science Topics (3 cr.)

Economics

E501 Seminar in Economics: Soviet-Type Economies in Transition (3 cr.)

E698 Comparative Economics and Economics of Transition (3 cr.)

Education

H551 Comparative Education I (3 cr.)

H552 Comparative Education II (3 cr.)

Graduate

I701 Multidisciplinary Seminar on Issues and Approaches in Global Studies (3 cr.)

I702 Independent Study in Global Studies (1-4 cr.)

Political Science

Y340 East European Politics (3 cr.)

Y351 Model European Union (3 cr.)

Y368 Russian and Soviet Foreign Policy (3 cr.)

Y382 Modern Political Thought (REE area topics) (3 cr.)

Y385 Russian Political Ideas (3 cr.)

Y557 Comparative Politics: Approaches and Issues (REE area topics) (3 cr.)

Y657 Comparative Politics (REE area topics) (3 cr.)

Y669 International Relations (REE area topics) (3 cr.)

Y675 Political Philosophy (REE area topics) (3 cr.)

Y681 Readings in Comparative Politics (REE area topics) (1-4 cr.)

Public and Environmental Affairs

V550 Topics in Public Affairs (REE area topics) (3 cr.)

V573 Comparative Public Management (3 cr.)

V575 Comparative Public Management and Administration (3 cr.)

V589 Topics in Public Policy: Democratization and Transformation in Eastern Europe and the Newly Independent States (3 cr.)

West European Studies

W501 The Economics of European Integration (3 cr.)

Group II (Historical/Geographical)

Central Eurasian Studies

R593 The Mongol Conquest (3 cr.)

R549 Topics in Hungarian Studies (3 cr.)

R509 Topics in Baltic-Finnish Studies (3 cr.)

R560 Modern Mongolia (3 cr.)

R618 Islamic Central Asia in the Sixteenth-Nineteenth Centuries (3 cr.)

R612 Central Asia under Russian Rule (3 cr.)

R611 Ethnic History of Central Asia (3 cr.)

R698 Empire and Ethnicity in Modern Russian History (3 cr.)

R599 Selected Topics in Central Eurasian Studies: Historical Topics (3 cr.)

R502 Finland in the Twentieth Century (3 cr.)

R501 The Baltic States since 1918 (3 cr.)

R629 Islamic Hagiography of Central Asia (3 cr.)

R713 Sources for the Central Asian History (3 cr.)

Geography

G427 Russia and Its Neighbors (3 cr.)

G428 Geography of Europe (3 cr.)

History

C393 Ottoman History (3 cr.)

T500 Topics in History (REE area topics) (3 cr.)

Recent Topics in REE History offered through REEI

R500 Gorbachev Revolution (3 cr.)

R500 E. Europe in the Twentieth Century (3 cr.)

R500 Empire of the Tsars (3 cr.)

R500 Russian Revolution and the Soviet Regime (3 cr.)

R500 The People vs. the Emperor (3 cr.)

H640 Colloquium in Russian History (4 cr.)

H645 Colloquium in East European History (4 cr.)

H720 Seminar in European History (REE area topics) (4 cr.)

H740 Seminar in Russian History (4 cr.)

H745 Seminar in East European History (4 cr.)

Group III (Sociocultural)

Anthropology

E332 Jewish Women: Anthropological Perspectives (3 cr.)

E334 Jews in Moslem Society (3 cr.)

E371 Modern Jewish Culture and Society (3 cr.)

E440 Political Anthropology (REE area topics) (3 cr.)

E600 Seminar in Cultural and Social Anthropology (REE area topics) (3 cr.)

E612 Anthropology of Russia and Eastern Europe (3 cr.)

E687 Ethnography of Europe (3 cr.)

Central Eurasian Studies

R592U370 Uralic Peoples and Cultures (3 cr.)

R513 Islam in the Soviet Union and Successor States (3 cr.)

R549 Topics in Hungarian Studies 9e cr.)

U427 Politics, Society, and Culture in Present-Day Hungary (3 cr.)

R584 Topics in Turkish Studies: Sociocultural Topics (3 cr.)

R560 Modern Mongolia (3 cr.)

R616 Religion and Power in Islamic Central Asia

R508 Estonian Culture and Civilization (3 cr.)

R564 Shamanism and Folk eligion of the Mongols (3 cr.)

R528 Post-Soviet Transition Central Asia (3 cr.)

R515 Politics and Society in Central Asia (3 cr.)

R516 Peoples and Cultures of Central Asia (3 cr.)

R790 Seminar in Central Eurasian Studies: Sociocultural Topics (3 cr.)

R711 Seminar on Comparative Study of Central Asia and Middle East (3 cr.)

Comparative Literature

C641 Literature in its Intellectual and Cultural Contexts (REE area topics) (4 cr.)

Criminal Justice

P680 Seminar: Issues in Criminal Justice: (REE area topics) (3 cr.)

Fine Arts

A425 Byzantine Art (4 cr.)

A442 Twentieth Century Art 1900-1924 (4 cr.)

A480 Russian Art (3 cr.)

A626 Problems in Byzantine Art (3 cr.)

Folklore

F755 Folklore, Culture, and Society (REE area topics) (3 cr.)

Germanic Studies

Y506 Topics in Yiddish Culture (3 cr.)

Y815 Individual Readings in Yiddish Studies: Language, Literature, Culture (1-4 cr.)

Journalism

J414 International Newsgathering Systems (3 cr.)

J514 International Communication (3 cr.)

J560 Topics Colloquium: Reporting Foreign Affairs (3 cr.)

J624 Russian and East European Press Systems (3 cr.)

J660 European Journalism History (3 cr.)

Library Science

L596 Internship in Library and Information Science (2-6 cr.)

L610 International Information Issues (3 cr.)

Music

M502 Composers (REE area topics) (3 cr.)

M510 Topics in Music Literature (REE area topics) (3 cr.)

M537 Topics in Russian Music (3 cr.)

M601 Topics in Music Research (REE area topics) (3 cr.)

M602 Seminar in Musicology: Music and Politics in Eastern Europe (3 cr.)

M695 Seminar in Romantic Music (REE area topics) (3 cr.)

Russian and East European Institute

R610 Seminar in International Librarianship: International Information Issues (3 cr.)

R620 Topics in Information, Literature, and Bibliography: Slavic Library Materials (3 cr.)

Slavic Languages and Literatures

R407 Readings in Russian Culture, History, and Society I (3 cr.)

R408 Readings in Russian Culture, History, and Society II (3 cr.)

R552 Russian and Soviet Film (3 cr.)

R553 Central European Cinema (3 cr.)

Group IV (Literature)

Central Eurasian Studies

R599 Topics in Central Eurasian Studies: Literature Topics (3 cr.)

R503 Classical Finnish Literature (3 cr.)

R504 Modern Finnish Literature (3 cr.)

R699 Seminar in Central Eurasian Studies: Literature Topics (3 cr.)

Comparative Literature

C535 The Later Nineteenth and Early Twentieth Centuries (REE area topics) (4 cr.)

C641 Literature in Its Intellectual and Cultural Contexts (REE area topics) (4 cr.)

Germanic Studies

Y505 Modernity and Tradition in Yiddish Literature and Culture (3 cr.)

Y815 Individual Readings in Yiddish Language, Literature, or Culture (1-4 cr.)

Slavic Languages and Literatures

C563 Literatures and Cultures of the Czechs and Slovaks I (3 cr.)

C564 Literatures and Cultures of the Czechs and Slovaks II (3 cr.)

C565 Seminar in Czech Literature and Culture (3 cr.)

L599 Prague School Linguistics and Poetics (3 cr.)

M565 Individual Readings in Romanian Language and Literature (cr. arr.)

P563 Survey of Polish Literature and Culture I (3 cr.)

P564 Survey of Polish Literature and Culture II (3 cr.)

P565 Seminar in Polish Literature and Culture II (3 cr.)

R405 Readings in Russian Literature I (3 cr.) (in Russian)

R406 Readings in Russian Literature II (3 cr.) (in Russian)

R500 Proseminar in Russian Literature (3 cr.)

R503 Old Russian Literature (3 cr.) (in Russian)

R504 Eighteenth Century Russian Literature (3 cr.)

R505 Nineteenth Century Russian Literature I (3 cr.)

R506 Nineteenth Century Russian Literature II (3 cr.)

R507 Twentieth Century Russian Literature I (3 cr.)

R508 Twentieth Century Russian Literature II (3 cr.)

R520 Twentieth Century Russian Author (3 cr.)

R530 Pushkin (3 cr.)

R531 Gogol (3 cr.)

R532 Dostoevsky (3 cr.)

R533 Tolstoy (3 cr.)

R534 Tolstoy and Dostoevsky (3 cr.)

R535 Chekhov (3 cr.)

R545 Jewish Characters in Russian Literature (3 cr.)

R549 Myth and Reality: Women in Russian Literature and in Life (3 cr.)

R550 Russian Drama (3 cr.)

R551 Russian Poetry (3 cr.)

R563 Pushkin to Dostoevsky (3 cr.)

R564 Tolstoy to Solzhenitsyn (3 cr.)

R601 Seminar in Russian Literature (1-6 cr.)

S563 Literature and Culture of the Southern Slavs I (3 cr.)

S564 Literature and Culture of the Southern Slavs II (3 cr.)

S565 Seminar in South Slavic Literature (3 cr.)

Faculty

Director

Associate Professor Maria Bucur-Deckard*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Robert W. Campbell* (Emeritus, Economics), Linda Dégh* (Emerita, Folklore), Denis Sinor* (Emeritus, Central Eurasian Studies, History)

Professors

Michael Alexeev* (Economics), David Audretsch* (School of Public and Environmental Affairs), Matthew Auer* (Public and Environmental Affairs), Joëlle Bahloul* (Anthropology), Randall Baker* (Emeritus, School of Public and Environmental Affairs), Jacob Bielasiak* (Political Science), Henry R. Cooper Jr.* (Slavic Languages and Literatures), Devin DeWeese* (Central Eurasian Studies), A. Benoit Eklof* (History), Ronald Feldstein* (Slavic Languages and Literatures), William Fierman* (Central Eurasian Studies), Steven L. Franks* (Linguistics, Slavic Languages and Literatures), Roy J. Gardner* (Economics), Jeffrey Hart* (Political Science), Jeffrey Isaac* (Political Science), Bruce Jaffee* (Business), Michael Kaganovich* (Economics), Janet Kennedy* (Fine Arts), Padraic Kenney* (History), Dov-Ber Kerler* (Jewish Studies), Hiroaki Kuromiya* (History), Vincent Liotta (Music),Terrence Mason* (School of Education), John Mikesell* (School of Public and Environmental Affairs), Maureen Pirog* (School of Public and Environmental Affairs), William Pridemore* (Criminal Justice), David L. Ransel* (History), Toivo Raun* (Central Eurasian Studies, History), Jean C. Robinson* (Political Science), Alvin Rosenfeld* (English), Ron Sela* (Central Eurasian Studies), M. Nazif Shahrani* (Anthropology, Central Eurasian Studies, Near Eastern Languages and Cultures), Beverly Stoeltje* (Anthropology), Frances Trix (Anthropology), Jeffrey Veidlinger* (History), Bronislava Volkova* (Slavic Languages and Literatures)

Associate Professors

Christopher Atwood* (Central Eurasian Studies), Maria Bucur-Deckard* (History), Aurelian Craiutu* (Political Science), Andrew Durkin* (Slavic Languages and Literatures), George Fowler* (Slavic Languages and Literatures), Halina Goldberg* (Musicology), Owen V. Johnson* (Journalism, History), Bill Johnston (TESOL/ Applied Linguistics), Frederika Kaestle* (Anthropology), Matthias Lehman* (History), Bryan McCormick* (Recreation and Park Administration), Vicky Meretsky* (School of Public and Environmental Affairs), Marth Nyikos* (Education), Philip Parnell* (Criminal Justice), Sarah Phillips* (Anthropology), Steven Raymer (School of Journalism), Regina Smyth (Political Science), Dina Spechler* (Political Science), Herbert Terry* (Telecommunications), Andrey Ukhov (Business), Timothy Waters (Law)

Assistant Professors

Justyna Beinek* (Slavic Languages and Literatures), Lynn Hooker* (Central Eurasian Studies), Hans Ibold (Journalism), Joshua Malitsky (Communication and Culture, Beate Sissenich (Political Science)

Associate Scientist/Scholar

Inta Carpenter (Folklore and Ethnomusicology)

Lecturer

Cigdem Balim-Harding (Near Eastern Languages and Cultures), Olena Chernishenko (Slavic Languages and Literatures), Jeffery Holdeman (Slavic Languages and Literatures), Miriam Shrager (Slavic Languages and Literatures), Ariann Stern-Gottschalik (Slavic Languages and Literatures), Valeria Varga (Central Eurasian Studies), Roman Zlotin (Geography)

Academic Advisor

Emily Liverman, Ballantine Hall 565, (812) 855-7309

Courses

Institute Colloquiums

REEI–R 500 Russian and East European Issues (1–4 cr.) Selected issues in Russian and East European history, politics, culture, economics, and society.

REEI–R 575 Graduate Readings in Russian and East European Studies (1–3 cr.) Consent of instructor and the director of the Russian and East European Institute required.

REEI–R 600 Proseminar in Russian and East European Area Studies (3 cr.) Introduction to the disciplines and methodologies of Russian and East European area studies.

REEI–R 601 Interdisciplinary Colloquium in Russian and East European Studies (1.5–3 cr.) Capstone course for the Russian and East European Institute master's degree, emphasizing readings in current problems and completion of a major research paper.

REEI–R 610 Seminar in International Librarianship: International Information Issues (3 cr.) Comparison of information policies, information standards, and library systems as they affect commercial, scholarly, scientific, and political information contexts.

REEI–R 620 Topics in Information, Literature, and Bibliography: Slavic Library Materials (3 cr.) P: Knowledge of at least one Slavic language or consent of instructor. Selection and acquisition of Slavic materials; special problems in organization and handling; Slavic bibliographies and other reference materials; online bibliographic databases.

Group One

Business

BUS–D 503 International Business Environment (1.5 cr.)

BUS–D 504 Operations of International Business (1.5 cr.)

BUS–D 594 International Competitive Strategy (1.5 cr.)

BUS–D 595 International Management (1.5 cr.)

BUS–F 570 International Financial Markets (1.5 cr.)

BUS–F 571 International Corporate Finance (1.5 cr.)

BUS–M 594 Global Marketing Management (3 cr.)

BUS–X 575 Kelley International Finance Perspectives Field Study (arr. cr.)

BUS–X 699 International Business and Culture (3 cr.)

Central Eurasian

CEUS–R 502 Finland in the Twentieth Century (3 cr.)

CEUS–R 515 Politics and Society in Central Asian (3 cr.)

CEUS–R 549 Topics in Hungarian Studies (3 cr.)

CEUS–R 589 Topics in Turkish Studies: Social Science Topics (3 cr.)

CEUS–R 693 Theorizing Central Eurasia: The Problems of Nationalism (3 cr.)

CEUS–R 697 Soviet and Post-Soviet Nationality Policies and Problems (3 cr.)

CEUS–R 594 Environmental Problems and Social Constraints in Northern and Central Eurasia (3 cr.)

CEUS–R 790 Seminar in Central Eurasian Studies: Social Science Topics (3 cr.)

Economics

ECON–E 501 Seminar in Economics: Soviet-Type Economies in Transition (3 cr.)

ECON–E 698 Comparative Economics and Economics of Transition (3 cr.)

Education

EDUC–H 551 Comparative Education I (3 cr.)

EDUC–H 552 Comparative Education II (3 cr.)

Graduate

GRAD–I 701 Multidisciplinary Seminar on Issues and Approaches in Global Studies (3 cr.)

GRAD–I 702 Independent Study in Global Studies (1–4 cr.)

Political Science

POLS–Y 340 East European Politics (3 cr.)

POLS–Y 351 Model European Union (3 cr.)

POLS–Y 368 Russian and Soviet Foreign Policy (3 cr.)

POLS–Y 382 Modern Political Thought (REE area topics) (3 cr.)

POLS–Y 385 Russian Political Ideas (3 cr.)

POLS–Y 557 Comparative Politics: Approaches and Issues (REE area topics) (3 cr.)

POLS–Y 657 Comparative Politics (REE area topics) (3 cr.)

POLS–Y 669 International Relations (REE area topics) (3 cr.)

POLS–Y 675 Political Philosophy (REE area topics) (3 cr.)

POLS–Y 681 Readings in Comparative Politics (REE area topics) (1–4 cr.)

Public and Environmental Affairs

SPEA–V 550 Topics in Public Affairs (REE area topics) (3 cr.)

SPEA–V 573 Comparative Public Management (3 cr.)

SPEA–V 575 Comparative Public Management and Administration (3 cr.)

SPEA–V 589 Topics in Public Policy: Democratization and Transformation in Eastern Europe and the Newly Independent States (3 cr.)

West European

WEUR–W 501 The Economics of European Integration (3 cr.)

Group Two

Central Eurasian

CEUS–R 509 Topics in Baltic-Finnish Studies (3 cr.)

CEUS–R 549 Topics in Hungarian Studies (3 cr.)

CEUS–R 560 Modern Mongolia (3 cr.)

CEUS–R 593 The Mongol Conquest (3 cr.)

CEUS–R 618 Islamic Central Asia in the Sixteenth-Nineteenth Centuries (3 cr.)

CEUS–R 501 The Baltic States since 1918 (3 cr.)

CEUS–R 502 Finland in the Twentieth Century (3 cr.)

CEUS–R 599 Selected Topics in Central Eurasian Studies: Historical Topics (3 cr.)

CEUS–R 611 Ethnic History of Central Asia (3 cr.)

CEUS–R 612 Central Asia under Russian Rule (3 cr.)

CEUS–R 629 Islamic Hagiography of Central Asia (3 cr.)

CEUS–R 698 Empire and Ethnicity in Modern Russian History (3 cr.)

CEUS–R 713 Sources for the Central Asian History (3 cr.)

Georgraphy

GEOG–G 427 Russia and Its Neighbors (3 cr.)

GEOG–G 428 Geography of Europe (3 cr.)

History

HIST–C 393 Ottoman History (3 cr.)

HIST–T 500 Topics in History (REE area topics) (3 cr.)

HIST–R 500 Topics in Russian and East European History (3 cr.)

HIST–R 640 Colloquium in Russian History (4 cr.)

HIST–R 645 Colloquium in East European History (4 cr.)

HIST–R 720 Seminar in European History (REE area topics) (4 cr.)

HIST–R 740 Seminar in Russian History (4 cr.)

HIST–R 745 Seminar in East European History (4 cr.)

Group Three

Anthropology

ANTH–E 332 Jewish Women: Anthropological Perspectives (3 cr.)

ANTH–E 334 Jews in Moslem Society (3 cr.)

ANTH–E 371 Modern Jewish Culture and Society (3 cr.)

ANTH–E 440 Political Anthropology (REE area topics) (3 cr.)

ANTH–E 600 Seminar in Cultural and Social Anthropology (REE area topics) (3 cr.)

ANTH–E 612 Anthropology of Russia and Eastern Europe (3 cr.)

ANTH–E 687 Ethnography of Europe (3 cr.)

Central Eurasian

CEUS–R 508 Estonian Culture and Civilization (3 cr.)

CEUS–R 513 Islam in the Soviet Union and Successor States (3 cr.)

CEUS–R 515 Politics and Society in Central Asia (3 cr.)

CEUS–R 516 Peoples and Cultures of Central Asia (3 cr.)

CEUS–R 528 Post-Soviet Transition Central Asia (3 cr.)

CEUS–R 549 Topics in Hungarian Studies (9 cr.)

CEUS–R 560 Modern Mongolia (3 cr.)

CEUS–R 564 Shamanism and Folk eligion of the Mongols (3 cr.)

CEUS–R 584 Topics in Turkish Studies: Sociocultural Topics (3 cr.)

CEUS–R 592 Uralic Peoples and Cultures (3 cr.)

CEUS–R 711 Seminar on Comparative Study of Central Asia and Middle East (3 cr.)

CEUS–R 790 Seminar in Central Eurasian Studies: Sociocultural Topics (3 cr.)

Comparative Literature

CMLT–C 641 Literature in its Intellectual and Cultural Contexts (REE area topics) (4 cr.)

Criminal Justice

CJUS–P 680 Seminar: Issues in Criminal Justice: (REE area topics) (3 cr.)

Fine Arts

FINA–A 425 Byzantine Art (3 cr.)

FINA–A 442 Twentieth Century Art 1900-1924 (3 cr.)

FINA–A 480 Russian Art (3 cr.)

FINA–A 626 Problems in Byzantine Art (3 cr.)

Folklore

FOLK–F 755 Folklore, Culture, and Society (REE area topics) (3 cr.)

Germanic Studies

GER–Y 506 Topics in Yiddish Culture (3 cr.)

GER–Y 815 Individual Readings in Yiddish Studies: Language, Literature, Culture (1–4 cr.)

Journalism

JOUR–J 414 International Newsgathering Systems (3 cr.)

JOUR–J 514 International Communication (3 cr.)

JOUR–J 560 Topics Colloquium: Reporting Foreign Affairs (3 cr.)

JOUR–J 624 Russian and East European Press Systems (3 cr.)

JOUR–J 660 European Journalism History (3 cr.)

Library Science

SLIS–L 596 Internship in Library and Information Science (2–6 cr.)

SLIS–L 610 International Information Issues (3 cr.)

Music

MUS–M 502 Composers (REE area topics) (3 cr.)

MUS–M 510 Topics in Music Literature (REE area topics) (3 cr.)

MUS–M 537 Topics in Russian Music (3 cr.)

MUS–M 601 Topics in Music Research (REE area topics) (3 cr.)

MUS–M 602 Seminar in Musicology: Music and Politics in Eastern Europe (3 cr.)

MUS–M 695 Seminar in Romantic Music (REE area topics) (3 cr.)

Russian East European

REEI–R 610 Seminar in International Librarianship: International Information Issues (3 cr.)

REEI–R 620 Topics in Information, Literature, and Bibliography: Slavic Library Materials (3 cr.)

Slavic Languages

SLAV–R 407 Readings in Russian Culture, History, and Society I (3 cr.)

SLAV–R 408 Readings in Russian Culture, History, and Society II (3 cr.)

SLAV–R 552 Russian and Soviet Film (3 cr.)

SLAV–R 553 Central European Cinema (3 cr.)

Group Four

Central Eurasian

CEUS–R 599 Topics in Central Eurasian Studies: Literature Topics (3 cr.)

CEUS–R 503 Classical Finnish Literature (3 cr.)

CEUS–R 504 Modern Finnish Literature (3 cr.)

CEUS–R 699 Seminar in Central Eurasian Studies: Literature Topics (3 cr.)

Comparative Literature

CMLT–C 535 The Later Nineteenth and Early Twentieth Centuries (REE area topics) (4 cr.)

CMLT–C 641 Literature in Its Intellectual and Cultural Contexts (REE area topics) (4 cr.)

Germanic Studies

GER–Y 505 Modernity and Tradition in Yiddish Literature and Culture (3 cr.)

GER–Y 815 Individual Readings in Yiddish Language, Literature, or Culture (1–4 cr.)

Slavic Languages

SLAV–C 563 Literatures and Cultures of the Czechs and Slovaks I (3 cr.)

SLAV–C 564 Literatures and Cultures of the Czechs and Slovaks II (3 cr.)

SLAV–C 565 Seminar in Czech Literature and Culture (3 cr.)

SLAV–L 599 Prague School Linguistics and Poetics (3 cr.)

SLAV–M 565 Individual Readings in Romanian Language and Literature (3 cr.)

SLAV–P 563 Survey of Polish Literature and Culture I (3 cr.)

SLAV–P 564 Survey of Polish Literature and Culture I (3 cr.)

SLAV–P 565 Seminar in Polish Literature and Culture II (3 cr.)

SLAV–R 405 Readings in Russian Literature I (3 cr.) (in Russian)

SLAV–R 406 Readings in Russian Literature II (3 cr.) (in Russian)

SLAV–R 500 Proseminar in Russian Literature (3 cr.)

SLAV–R 503 Old Russian Literature (3 cr.) (in Russian)

SLAV–R 504 Eighteenth Century Russian Literature (3 cr.)

SLAV–R 505 Nineteenth Century Russian Literature I (3 cr.)

SLAV–R 506 Nineteenth Century Russian Literature II (3 cr.)

SLAV–R 507 Twentieth Century Russian Literature I (3 cr.)

SLAV–R 508 Twentieth Century Russian Literature II (3 cr.)

SLAV–R 520 Twentieth Century Russian Author (3 cr.)

SLAV–R 530 Pushkin (3 cr.)

SLAV–R 531 Gogol (3 cr.)

SLAV–R 532 Dostoevsky (3 cr.)

SLAV–R 533 Tolstoy (3 cr.)

SLAV–R 534 Tolstoy and Dostoevsky (3 cr.)

SLAV–R 535 Chekhov (3 cr.)

SLAV–R 545 Jewish Characters in Russian Literature (3 cr.)

SLAV–R 549 Myth and Reality: Women in Russian Literature and in Life (3 cr.)

SLAV–R 550 Russian Drama (3 cr.)

SLAV–R 551 Russian Poetry (3 cr.)

SLAV–R 563 Pushkin to Dostoevsky (3 cr.)

SLAV–R 564 Tolstoy to Solzhenitsyn (3 cr.)

SLAV–R 601 Seminar in Russian Literature (1–6 cr.)

SLAV–S 563 Literature and Culture of the Southern Slavs I (1–6 cr.)

SLAV–S 564 Literature and Culture of the Southern Slavs II (3 cr.)

SLAV–S 565 Seminar in South Slavic Literature (3 cr.)

Scientific Computing

College of Arts and Sciences

Departmental URL: www.indiana.edu/~scicomp

Departmental E-mail:
scicompminor@denali.physics.indiana.edu

Curriculum

Ph.D. Minor in Scientific Computing

Scientific computing is an interdisciplinary, interdepartmental graduate minor recognizing important changes that have introduced a powerful and essential mode of scientific research. The increasing availability of high-performance computers has led to a method of scientific inquiry based on mathematical models solved by means of numerical computations, analyzed and viewed by means of advanced computer graphics. Carrying out research by these means is necessarily multidisciplinary, calling on advanced skills in areas that span many classical divisions of academia. The Ph.D. minor in scientific computing provides the interdepartmental education necessary to equip students for research within this paradigm. Scientific computing courses are generally organized into four categories: numerical analysis, scientific applications, scientific visualization, and high-performance computing. Students are encouraged to develop expertise in more than one of those areas.

Course Requirements

Twelve (12) credit hours in approved courses, 6 credit hours of which must be outside the student's major department. The course P573 Introduction to Scientific Computing I has been created as an introductory course for students in the program. Students entering with a background in computational science or engineering, in consultation with their advisor on the Scientific Computing Committee, may omit this course from their curriculum. Students develop their course of study with two faculty: one from the student's home department and the other a member of the Graduate Committee on Scientific Computing from outside the student's home department. The proposed course of study will be submitted for

approval by the Graduate Committee on Scientific Computing. If approved, a letter detailing the course of study will be signed by the director with copies given to the student and the student's home department. Significant changes to the course of study need to undergo the same process of development and approval. Certification of completion of the minor requirements will be by the director or an appointed representative.

Faculty

Director

Distinguished Professor Steven Gottlieb*

Interdepartmental Graduate Committee on Scientific Computing

College Professor

Roger Temam* (Mathematics)

Distinguished Professors

Steven Gottlieb* (Physics), Peter Ortoleva* (Chemistry)

Professors

Randall Bramley* (Informatics), Haldan Cohn* (Astronomy), Andrew Hanson* (Informatics), Charles Horowitz* (Physics), Michael Jolly* (Mathematics), Phyllis Lugger* (Astronomy), Gary Pavlis* (Geological Sciences), Brian Serot* (Physics)

Associate Professor

Gregory Olyphant* (Geological Sciences)

Courses

Courses that can be used to satisfy the Scientific Computing minor requirement include, but are not limited to, the following list:

A550 (Astronomy), A570 (Astronomy), A575 (Astronomy—provided that the course project involves numerical computation), P573 (CSCI), B582 (CSCI), B673 (CSCI), C668 (Chemistry), P410 (Physics), P609 (Physics), P610 (Physics), P700 (Physics), M441 (Mathematics), M442 (Mathematics), M471 (Mathematics), M472 (Mathematics), M571 (Mathematics), M572 (Mathematics), G514 (Geological Sciences), G612 (Geological Sciences), and G614 (Geological Sciences).

Second Language Studies

College of Arts and Sciences

Departmental E-mail: dsls@indiana.edu

Departmental URL: www.indiana.edu/~dsls

Curriculum

Degrees Offered

Master of Arts in TESOL/Applied Linguistics, Master of Arts in Second Language Studies, Doctor of Philosophy in Second Language Studies, Doctoral Minor in Second Language Studies, Certificate in Applied Linguistics (TESOL).

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts in TESOL and Applied Linguistics

Admission Requirements

Admission to the M.A. program will be based on evaluations of

1. undergraduate grade record,
2. level of achievement on the Graduate Record Examination General Test,
3. three letters of recommendation, and
4. undergraduate exposure to linguistics and related course work,
5. statement of purpose,
6. curriculum vitae.

Students not satisfying requirement (4) may be admitted, but may be required to do course work prerequisite to introductory graduate courses.

Requirements

A total of thirty (30) credit hours is required, including the core courses: T510 Modern English Grammar, S511 Second Language Syntax, T514 English Phonology for Language Learning and Teaching, S532 Models of Second Language Acquisition, T534 Methods in Teaching ESL/EFL to Adults (TESOL), T535 TESOL Practicum, and T550 Language Testing. Additional electives are required as approved by the department. A grade point average of 3.0 (B) must be maintained in 500-level courses in Second Language Studies; any student who falls below a GPA of 3.0 will be put on probation and unless the student brings this record up to a 3.0 grade point average in the following semester may be dismissed from the program.

Foreign Language Requirements

Reading knowledge of one foreign language approved by the department.

Thesis

Optional; maximum of 4 credit hours.

Final Examination

None.

Master of Arts in Second Language Studies

Admission Requirements

Admission to the M.A. program will be based on evaluations of

1. undergraduate grade record,
2. level of achievement on the Graduate Record Examination General Test,
3. three letters of recommendation,
4. undergraduate exposure to linguistics and related course work,
5. statement of purpose,
6. curriculum vitae.

Students not satisfying requirement (4) may be admitted, but may be required to do course work prerequisite to introductory graduate courses.

Requirements

A total of thirty (30) credit hours is required, including the core courses: S511 Second Language Syntax,

S512 Second Language Phonology, S532 Models of Second Language Acquisition, S533 Second Language Acquisition Research Design, and S536 Research in Second Language Pedagogical Contexts. Additional electives are required as approved by the department. A grade point average of 3.0 (B) must be maintained in 500-level courses in Second Language Studies; any student who falls below a GPA of 3.0 will be put on probation and unless the student brings this record up to a 3.0 grade point average in the following semester may be dismissed from the program.

Foreign Language Requirements

Reading knowledge of one foreign language approved by the department.

Thesis

Optional; maximum of 4 credit hours.

Final Examination

None.

Doctor of Philosophy in Second Language Studies

Admission Requirements

Admission to the Ph.D. program will be based upon evaluation of

1. previous academic record,
2. level of achievement on the Graduate Record Examination General Test,
3. three letters of recommendation,
4. previous exposure to TESOL/Applied Linguistics and related course work,
5. statement of purpose,
6. statement of research interests,
7. curriculum vitae.

Degree Requirements

A total of ninety (90) credit hours are required, with at least 66 credit hours of course work plus up to 24 credit hours of dissertation research. A grade point average of 3.0 (B) must be maintained in Second Language Studies coursework; any student who falls below a GPA of 3.0 will be put on probation and unless the student brings this record up to a 3.0 grade point average in the following semester may be dismissed from the program.

Required Core Courses

Every student in the program will take six core courses (18 cr. total):
S511 Second Language Syntax (3 cr.)
S512 Second Language Phonology (3 cr.)
S532 Models of Second Language Acquisition (3 cr.)
S533 Second Language Acquisition Research Design (3 cr.)
S536 Research in Second Language Pedagogical Contexts (3 cr.)
S670 Language Typology (3 cr.)

Seminars (3 cr. each)

All students will complete at least 6 credits in two seminars in Second Language Studies. These courses may be applied to other requirements as well.

Breadth requirements

All students will complete at least 3 credits each in four of the following five areas for a total of 12 credits. There is no restriction on the department in which these courses may be completed. Courses in the Second Language Studies core cannot be used to complete this requirement.

Historical Linguistics/Language Contact/Language Revitalization
Sociolinguistics/Pragmatics/Discourse Analysis
Morphology/Syntax/Semantics
Pedagogy
Phonetics/Phonology

Research Concentration

Students will establish a research concentration in consultation with their committees. A research concentration may be established by enrolling in five courses in the area of specialty, by working in an appropriate research laboratory or research group, by undertaking appropriate field work or training, by conducting approved independent research and publication, or by a combination of these. Students who satisfy their research concentrations through participation in a research lab or research group or through independent research and publication may count the equivalent of up to three courses (9 credits) of S690 (Directed Readings) toward the 66 credits required for the doctorate. The research concentration is represented in the research qualifying examination.

Minor and Language Concentrations

All students will be required to have a minor. The selected minor should be appropriate to the student's choice of subdiscipline within Second Language Studies. Appropriate minors include Anthropology, Cognitive Science, Communication and Culture, foreign languages, Language Education, Linguistics, Psycholinguistics, and Sociology. In all cases the number of hours to be included in the minor will be consistent with the requirements of the unit granting the minor.

Some students may wish to pursue a significant concentration in a particular language area or in English as a Second Language. Students pursuing a language concentration in French, German, or Spanish will ordinarily take at least 21 hours in the Department of French and Italian, the Department of Germanic Studies, or the Department of Spanish and Portuguese, as appropriate. (Additional language concentrations may be added in the future.) Providing a student has completed all the requirements for the minor in the language department, there is no need to complete both a minor and a language concentration. The language concentration will be the student's minor of record.

Language Requirements

The language requirement for the Ph.D. is two research languages, which will ordinarily be languages of scholarship in the student's specialty. In addition, students will take 1-2 courses in a language outside of the language family of the student's native language (for example, a native English speaker would take courses in a non-Indo-European language; in contrast, a native speaker of Chinese might take courses in Russian). To

satisfy this requirement, a student could complete a one-year language class, take the Field Methods sequence in Linguistics (L653-L654), or take a course on the structure of an appropriate language.

Qualifying Examinations

All students must pass a set of examinations, consisting of a General Qualifying Examination (GQE) and a Research Qualifying Examination (RQE). These examinations are intended to provide an institutional structure for students as they move from taking courses to writing a dissertation.

General Qualifying Examination (GQE)

The GQE is meant to demonstrate the ability to synthesize material explored in courses and in independent reading. The GQE will consist of two cloistered examinations, each three hours in duration. Students will elect two of the following five areas, corresponding to the breadth requirements.

Historical Linguistics/Language Contact/Language Revitalization
Second Language Morphology/Syntax/Semantics
Second/Foreign Language Pedagogy
Second Language Phonetics/Phonology
Second Language Sociolinguistics/Pragmatics/Discourse Analysis

Most students will take the GQE the semester after coursework is completed. In general, the two cloistered exams will be offered on two consecutive days in October and in February. The GQE schedule will be posted by the end of each semester by the committee, each student will inform the Director of Graduate Studies of his or her two areas no later than one month in advance of the scheduled exam. Appropriate faculty members will submit potential questions to the Director of Graduate Studies, who in turn will select and edit questions and coordinate grading.

On any given cloistered exam, the student will have the opportunity to de-select at least one question; the student will be required to answer two of three questions. All students selecting a given area in a given semester will receive the same questions. All responses to any given exam question will be graded by the same two faculty members. The grades are Pass and Fail. To pass any given cloistered exam, at least three of the four grades assigned must be Pass. If a student fails to pass one or both sections, s/he may take it a second time when the GQE is offered in the next semester. After consultation with his or her advisory committee, such a student may also select a different exam area.

Research Qualifying Examination (RQE)

The RQE is designed to demonstrate that students have developed sufficient depth in their understanding of a particular constellation of research questions and that their academic writing skills are sufficiently well honed that they are able to begin meaningful work on their dissertations. In contrast to the GQE, the research exams will be scheduled individually. We recommend that the research exam be completed in the semester following the successful completion of the GQE. Nevertheless, students are required to have demonstrated preparation in a research focus to the satisfaction of their advisory committees before they will be permitted to proceed with the RQE. In contrast to the GQE, the advisory committee administers the RQE and reports successful completion of the examination to the Director of Graduate Studies.

The RQE may take one of two forms:

Option 1: a publishable research paper which pilots the student's dissertation research, or

Option 2: a research essay which will be completed by the student over the course of one full week.

For Option 1, the student must complete, to the advisory committee's satisfaction, an original sole-authored research paper in the student's intended area of dissertation research, which in the committee's judgment, is ready for submission to one of the following journals: Studies in Second Language Acquisition, Second Language Research, Language Learning, TESOL Quarterly, or Applied Linguistics. Research papers are 8,000-10,000 words in length including text, references, tables, figures, and appendices.

For Option 2, the advisory committee will assign a single question arising from extensive consultation with the student reflecting the individual student's research focus, as defined through a series of courses, approved independent research, participation in research groups or labs, outside publications, or a combination of these. The student is to complete the essay within exactly one week, but is free to employ data collected and analyzed ahead of time.

Dissertation Proposal

The proposal for the dissertation must be approved by the student's research committee. Proposals should include pilot studies. The research committee may have the same membership as the advisory committee or the student may choose different members. The advisor for the dissertation will be a faculty member in the Department of Second Language Studies and a member of the Graduate Faculty. One of the three other members of the committee will be based in the minor department or in the department of the student's language concentration. The student will defend the proposal at a public colloquium.

Dissertation (up to 24 cr.)

Students are required to complete a dissertation that constitutes an original and significant contribution to the field of Second Language Studies. The dissertation must be successfully presented to the research committee in an oral defense as described in the University Graduate School Academic Bulletin.

Ph.D. Minor in Second Language Studies

The minor consists of a minimum of four courses (12 credit hours) in Second Language Studies. Courses should be at the 500 level or above. A grade point average of 3.0 (B) or better must be achieved in these courses. All SLS minors must include S532. The prerequisite for S532 is a graduate level course in morphosyntax; if taken in SLS this prerequisite will count toward the minor. A specific program for satisfying the minor requirement must be developed in consultation with the student's minor advisor.

Graduate Certificate in Applied Linguistics (TESOL)

Students not intending to get a Master's degree may wish to pursue a program leading to the Certificate in TESOL and Applied Linguistics. The requirements for this certificate include twenty (20) credit hours, approved by the department. Normally, students will complete T510, S511, T514, S532, T534, T535, and T550. Other hours will be selected in consultation with a departmental advisor. A grade point average of 3.0 (B) must be maintained for the 20 credit hour certificate program. The certificate is a postbaccalaureate award.

English as a Foreign Language

The Department of Second Language Studies also offers English language instruction, including T501 Academic English for International Graduate Students (2-3 cr.). For more information, please see the English Language Instruction website.

Faculty

Chairperson

Professor Kathleen Bardovi-Harlig*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Kathleen Bardovi-Harlig*, Rex A. Sprouse*

Associate Professors

Laurent Dekydtspotter*, Doreen Ewert, Bill Johnston*, Phillip S. LeSourd*

Assistant Professors

Isabelle Darcy, David Stringer

Adjunct Associate Professors

Kenneth de Jong* (Linguistics), César Félix-Brasdefer* (Spanish and Portuguese), Kimberly L. Geeslin* (Spanish and Portuguese)

Emeriti

Harry L. Gradman*, Beverly Hartford*

Academic Advising for Second Language Studies

Memorial Hall 315, 855-7951

Courses

SLST–S 511 Second Language Syntax (3 cr.) Examination of form and acquisition of nonnative syntax. Consideration of whether nonnative grammars are "fundamentally different" than native grammars, role of the learner's native language, initial state of nonnative syntax, and subsequent development. Comparison of child native acquisition and adult native acquisition.

SLST–S 512 Second Language Phonology (3 cr.) Introduces students to second language phonological systems in light of issues in current phonological theory. Examines the acquisition of segments, syllable constraints, and prosody in second languages. We discuss mechanisms that determine the role of the first language in second language development. Students will develop problem-solving skills.

SLST–S 531 Child Second Language Development (3 cr.) Examines issues in child second language (L2) acquisition, including the critical period hypothesis, universal grammar, and role of the native grammar in the initial state of child L2 acquisition. Child L2 acquisition of phonology, morphology, and syntax is contrasted with adult L2 acquisition, child monolingual acquisition, and simultaneous bilingual acquisition.

SLST–S 532 Foundations of Second Language Acquisition (3 cr.) P: SLST T510 or S511, LING L543 or equivalent. Introduces students to second language acquisition research. Critically examines major hypotheses about the ways in which second languages develop. Discussions include a range of languages. Models include a variety of approaches: corpora-based, functionalist, generative, processing-based, sociocultural, and universals of language.

SLST–S 533 Second Language Acquisition Research Design (3 cr.) P: S532. Foundations of Second Language Acquisition. Examines a variety of research designs, elicitation tasks, and experimental formats in second language acquisition research appropriate to studies of production, processing, perception, structure, and pragmatics. Students will gain experience in designing and carrying out studies.

SLST–S 536 Research in Second Language Pedagogical Contexts (3 cr.) Surveys current issues and research areas in adult second language pedagogy. Considers social, cultural, political and linguistic aspects of language teaching and learning; emphasizes the substantive topics that are addressed; the range of institutional, national and educational contexts of research; and the theoretical lenses that frame the research.

SLST–S 600 Topics in Second Language Studies (3 cr.) Intensive study and analysis of selected issues and problems in second language studies. May be taken more than once with different topics.

SLST–S 605 Second Language Processing (3 cr.) Investigates how second language users assign representations to utterances of the target language input. Surveys research on the human sentence processing mechanism, its relation to acquisition of grammars, and processing issues as they impact L2 acquisition. Students will become familiar with theoretical issues, empirical studies, and various research methodologies.

SLST–S 622 World Englishes (3 cr.) Examines standard and non-standard varieties of English in countries where English is spoken as a first language, an official language, or an influential foreign language. Selected studies of sociolinguistic variables, language change, code-switching, and universal grammar inform discussion of variation in Afro-American English, Indian English, British dialects, and English-based creoles.

SLST–S 632 Current Research in Second-Language Acquisition (3 cr.) P: S532. Foundations of Second Language Acquisition. This course addresses issues in recent research in second-language acquisition. Examines selected cases illustrating the relation of second-language

acquisition studies to linguistic theory. Emphasis on the collection and analysis of acquisition data.

SLST–S 640 Discourse Analysis (3 cr.) Surveys theories of discourse analysis including speech acts, conversational maxims, conversation analysis, ethnomethodology, text analysis, and critical discourse analysis. Applications of those theories to areas of special interest to applied linguistics, including native speaker-nonnative speaker interaction, nonnative speaker conversation, classroom discourse, and analysis of language in professional settings.

SLST–S 650 Design and Development of Language Assessment (3 cr.) P: SLST T550 or equivalent. Provides students with advanced conceptual structures such as the assessment-use-argument (AUA) framework to guide design, development, and use of particular language assessment instruments. Development and design of assessment instruments will serve as demonstrations of students' control of course material and as preparation for on-the-job development of assessments.

SLST–S 660 Contrastive Discourse (3 cr.) P: T532 or consent of the instructor. Considers cross-cultural text organization from the native and nonnative reader's and writer's viewpoints. Various aspects of text are emphasized, including coherence and cohesion, and formal and cultural schemata in genres such as expository writing, letters, news articles, and narratives.

SLST–S 670 Language Typology (3 cr.) Introduction to linguistic typology, the study of how languages differ and how they are alike in terms of formal features. Focuses on a variety of syntactic and morphological features of languages including: lexical classes, word order, case and agreement systems, animacy, definiteness, and gender; valence-changing devices; verbal categories and subordination.

SLST–S 690 Independent Readings in Second Language Studies (1–4 cr.) Directed readings in research topics for second language studies.

SLST–S 700 Seminar in Applied Linguistics (3 cr.) This seminar will deal with major issues in applied linguistics and second language studies research and theory. The specific title will be announced well in advance of each semester.

SLST–S 711 Seminar in Second Language Acquisition (3 cr.) Selected problems and issues in second language acquisition. Completion of SLS core or permission of the instructor is required.

SLST–S 800 Dissertation Research in Second Language Studies (1–12 cr.) Dissertation research. Arranged. Permission of instructor willing to supervise research is required.

SLST–T 500 Topics in TESOL/Applied Linguistics (3 cr.) Selected topics, issues, and problems in TESOL and applied linguistics. Topics in this course are of particular interest to the second language practitioner. May be taken more than once with different topics.

SLST–T 501 Academic English for International Graduate Students (2–3 cr.) Designed to improve spoken or written skills for graduate school. Sections on academic writing (research papers, references, reviews, and critical syntheses) and academic speaking (presentations, discussions, and group work) address a range of academic writing and speaking styles. May be taken more than once if topic is different. Credit hours, though counting toward full-time student status, do not accrue toward the total number required for a graduate degree.

SLST–T 500 Topics in TESOL/Applied Linguistics (3 cr.) Selected topics, issues, and problems in TESOL and applied linguistics. Topics in this course are of particular interest to the second language practitioner. May be taken more than once with different topics.

SLST–T 501 Academic English for International Graduate Students (2–3 cr.) Designed to improve spoken or written skills for graduate school. Sections on academic writing (research papers, references, reviews, and critical syntheses) and academic speaking (presentations, discussions, and group work) address a range of academic writing and speaking styles. May be taken more than once if topic is different. Credit hours, though counting toward full-time student status, do not accrue toward the total number required for a graduate degree.

SLST–T 502 Communication Skills for International Associate Instructors (3 cr.) P: Completion of all SLST T101 courses assigned by the English Language Improvement Program (SLS) and a score of NC4 or C3 on the TEPAIC. The primary objective of this course is to help international students become effective teachers in the US classroom. This course addresses the communication, teaching, and cultural issues that international students are likely to confront as an associate instructor at Indiana University. This course carries credit as a graduate elective.

SLST–T 510 Modern English Grammar (3 cr.) P: Completion of all SLST T101 courses assigned by the English Language Improvement Program (SLS) and a score of NC4 or C3 on the TEPAIC. An examination of the principal features of the grammar of English. The course draws upon traditional, structural, functional, and transformational accounts of the structure of English, with an emphasis on the pedagogical application of these accounts in the teaching of English as a second language.

SLST–T 514 English Phonology for Language Learning and Teaching (3 cr.) Introduction to phonology as it applies to the learning and teaching of second languages. Does not satisfy the phonology requirement for the Ph.D. in linguistics.

SLST–T 522 Survey of Applied Linguistics (3 cr.) Intensive readings on selected topics relevant to the acquisition of second languages, sociolinguistics, bilingualism, testing, and research directions. Readings will, for the most part, be current and subject to change as the course is offered.

SLST–T 534 Methods in Teaching ESL/EFL to Adults (TESOL) (3 cr.) P: S532 Foundations of Second Language Acquisition. Analyzes and critiques approaches and methods in teaching ESL/EFL to adults, including research and experiential perspectives on practice and theory. Surveys traditional and innovative approaches in language teaching, analyzes language classroom

interaction, and sets language teaching in cultural and sociopolitical context. To be taken concurrently with T535 TESOL Practicum.

SLST–T 535 TESOL Practicum (3 cr.) P: S532 Foundations of Second Language Acquisition. Under supervision, students teach English as a second language to adult learners. The course provides experience in testing, placement, and materials preparation. Classroom lectures focus on issues related to the art and profession of language teaching. To be taken concurrently with SLST T534, Methods in Teaching ESL/EFL to Adults.

SLST–T 538 Reading and Writing (3 cr.) Examines the relationship of second-language reading and writing development to second-language acquisition, composition theory, reading and writing research, and second-language teaching. Topics include theories of second-language composition, second-language writing processes, reading as input for writing, academic literacy development, learning environments, and individual differences.

SLST–T 539 Pragmatics and Second-language Learning (3 cr.) P: S532 Foundations of Second Language Acquisition. This course familiarizes students with principles and issues in pragmatics and cross-cultural pragmatics. Students will learn appropriate data collection techniques and will collect primary data, learn to analyze spoken and written data, and discuss the application of pragmatics to language learning and teaching, cross-cultural research, and international communication.

SLST–T 550 Language Testing (3 cr.) P: L503 or equivalent. Consideration of theory of assessing competence in second languages. Preparation and administration of various language testing instruments. Primary emphasis on English as a second language.

SLST–T 556 Language Learning Technology (3 cr.) Examines the theories of language learning underlying language learning technology. Examines current language learning technology for second and foreign language learning, teaching, testing, and research, and considers its demonstrable efficacy. Identifies and explores specific areas in need of further research and development.

SLST–T 560 American Culture (3 cr.) P: For international students only. A survey of issues related to the culture and character of the people of the United States. Topics include the national, social, and linguistic origins of the American people, political and social institutions, and the arts.

SLST–T 622 World Englishes (3 cr.) P: For international students only. Investigation of the basic features of varieties of English as formally structured systems. Attitudes toward speech and the relationship of language differences to the attainment of social and educational goals.

SLST–T 690 Advanced Readings in TESOL and Applied Linguistics (1–4 cr.)

SLST–G 901 Advanced Research (1–4 cr.) P: Completed 90 graduate credits. Requires permission of Department, see SLST Graduate Secretary, 855-7951 in Memorial Hall 315 for class authorization to register.

Slavic Languages and Literatures

College of Arts and Sciences
Departmental E-mail: iuslavic@indiana.edu

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Program Information

Attention is called to the program of the Russian and East European Institute, which offers students an opportunity to combine work for an advanced degree in the Department of Slavic Languages and Literatures with interdisciplinary area study of the former Soviet Union or Eastern Europe.

Attention is also called to the Summer Workshop in Slavic and East European Languages, which provides intensive language training in Russian at advanced levels not available during the regular academic year. The workshop also offers first-year and occasionally second-year courses in other Slavic, East European, and Eurasian languages.

Special Departmental Requirements

(See also general University Graduate School requirements.)

General Provision

Students wishing the recommendation of the department for teaching positions must present evidence of their ability to teach Russian.

Master of Arts Degre

Admission Requirements

Graduate Record Examination General Test. In addition, entering students are expected to have: (1) active knowledge of the Russian language adequate for graduate study, as determined by a proficiency examination based on the department's fourth-year course, (2) a general acquaintance with the major works of nineteenth- and twentieth-century Russian literature equivalent to at least the materials covered in a two-semester undergraduate survey course, and (3) a reading knowledge of one non-Slavic research language (typically French or German, but others may qualify). Students seeking to study a departmental language other than Russian must demonstrate a clear interest in that language (e.g., prior study, overseas experience in the relevant country, etc.) for admission.

Students with a Russian language deficiency are urged to apply to the Summer Workshop. Courses taken to satisfy deficiency requirements in Russian or the research language will not carry graduate credit and will lie outside of the 30 credit hours required for the M.A. degree. Students with a deficiency in Russian literature should take the departmental survey courses (R563-R564) during their first two semesters.

General Course Requirements

A minimum of thirty (30) credit hours of courses carrying graduate credit, at least 20 of which must be taken in the Department of Slavic Languages and Literatures.

Track Requirements

In addition to the general course requirements, students pursuing the M.A. degree shall complete one of the four programs described as follows. Tracks 1 and 2 are structured primarily for preparing students who wish to continue toward a Ph.D. degree with a specialization in Russian literature or Slavic linguistics; Track 3 is designed mainly for students pursuing a departmental language other than Russian; Track 4 is for those with other career goals in mind.

Track 1 Russian Literature M.A. Requirements

1. R500 Proseminar in Russian Literature or CMLT C501 Introduction to Contemporary Literary Studies or equivalent
2. 571 Old Church Slavonic or L576 History of the Russian Literary Language or L501 Structure of Russian I
3. R501-R502 Fifth Year Russian or equivalent
4. R563-564 Two-semester survey course of Russian literature or equivalent
5. Four literature courses (at least three from SLAV, substitutions subject to departmental approval)

Total: 30 credits

Track 2 Slavic Linguistics M.A. Requirements

1. L501 Structure of Russian I: Phonology and Morphology
2. L502 Structure of Russian II: Syntax and Semantics
3. L571 Old Church Slavonic or L576 History of Russian Literary Language or equivalent
4. One course in Slavic literature, culture or film
5. Two semesters of a West or South Slavic language
6. R501-R502 Fifth year Russian or equivalent.
7. Two linguistics courses (SLAV or elective from LING, SLS, or other unit, subject to departmental approval)

Total: 30 credits

Track 3 Language and Area Studies
Two survey-type Slavic literature courses at the graduate level; a Slavic or East European language other than Russian (6-12 credit hours), and 3 credit hours in the department as approved by the graduate advisor; and, in addition, 9 credit hours of graduate courses inside or outside the department selected with the approval of the graduate advisor. (Students taking this option are encouraged to fulfill the additional requirements for a certificate in the Russian and East European Institute. See following.)

Track 4 Dual Concentration
Two survey-type Slavic literature courses at the graduate level; plus two additional graduate courses in the department; and a program of at least 9 graduate credits in one other department approved by the graduate advisor, such as business, comparative literature, economics, fine arts, geography, history, linguistics, literature, music, political science, or a foreign language.

Students may be exempted from Slavic language courses by passing proficiency examinations.

Examination

No examination is required for a terminal M.A. degree, but a doctoral admission examination, based on the M.A. program for Tracks 1, 2, or 3, is required for admission to Ph.D. work and must normally be passed before the student registers for the fifth semester of graduate work. (A student working simultaneously for the M.A. degree and an area certificate in the Russian and East European Institute must pass the doctoral admission examination before registering for the sixth semester of graduate work.)

Master of Arts for Teachers Degre

Admission Requirements

Applicants should have a knowledge of the Russian language adequate for graduate study (a minimum of three years is acceptable, but four is preferred). A broad, solid undergraduate program in the liberal arts is strongly recommended. New students must take a proficiency examination in Russian before registering, and those whose performance is inadequate will be required to take appropriate courses in Russian until their proficiency reaches the level required of B.A. candidates in the department.

Major Field Requirements

A minimum of 20 credit hours, to include R501-R502, R403, and History D411 or equivalent. Students who have not had a two-semester nineteenth- and twentieth-century Russian literature course must take R263-R264 (without graduate credit) or replace these with two survey-type Russian literature survey courses at the graduate level. Students who have not taken a course in methods of teaching modern foreign languages are required to take Education M455 Methods of Teaching Modern Foreign Languages or the departmental equivalent.

Language Requirement

Active knowledge of Russian (fifth-year proficiency level).

Examination

Oral and written test of proficiency in Russian.

Doctor of Philosophy Degree

Two plans of study are offered: Plan A: Russian Literature; Plan B: Slavic Linguistics

Plan A: Russian Literature

(A comparable program will be worked out for students choosing another Slavic literature as their major field.)

Admission Requirements

A doctoral admission examination based on the Indiana University M.A. degree in Slavic languages and literatures under Track 1 (Russian literature). One written exam that covers the following fields: (1) Old Russian Literature and the eighteenth century; (2) the nineteenth century; (3) the twentieth century; (4) poem analysis. Students holding an M.A. in Slavic languages and literatures from another institution may be required, at the discretion of the department, to pass this examination no later than their second semester in attendance at Indiana University.

General Requirements

1. 30 credits from M.A.

2. 12 credits from minor (if second Slavic language, cannot include first year).
3. One Slavic linguistics course.
4. Two semesters of a second Slavic language.
5. At least six literature courses (at least four from SLAV, substitutions subject to departmental approval),,including at least one seminar.

Total: 90 (at least 69 credits of course work and up to 21 credits of dissertation).

Language Requirement

Active knowledge of written and spoken Russian beyond the minimum required for the M.A.; reading knowledge of German, French, and one other Slavic language. Another research language may be substituted for French or German with departmental approval.

Qualifying Examination

Three written examinations. One will cover all genres of literature in one of the following three periods: (1) from the beginning to 1800; (2) the nineteenth century; (3) the twentieth century. The second examination will cover the whole history of Russian literature, but will be confined to all forms of narrative. The third examination will cover one of the following categories in its entirety: (1) poetry, exclusive of drama; (2) dramatic literature; (3) film. All three of these written examinations are to be taken within two successive semesters. When they have been passed, an oral examination will be given within one month. The oral examination will cover not only all of Russian literature, but also the following: Russian history and culture and major literary developments in the rest of Europe, including those in the second Slavic literature. The examination will be designed to provide an opportunity for students to demonstrate the range and depth of their scholarly interests and ability. In the semester following the oral qualifying exam, a candidate is required to submit to all members of his/her committee a dissertation prospectus of approximately 10 pages with additional short bibliography.

Plan B: Slavic Linguistics

Admission Requirement

A doctoral admission examination based on the Indiana University M.A. degree in Slavic languages and literatures under Track 2 (Slavic linguistics). At the discretion of the department and based on the student's M.A.-level work, this exam may be waived.

General Requirements

1. 30 credits from M.A.
2. One course in Slavic literature, culture or film
3. Two semesters of a third Slavic language. 12 credits from minor .
4. At least six linguistics courses, including at least one seminar.

Total: 90 (at least 69 credits of course work and up to 21 credits of dissertation).

Language Requirement

Active knowledge of a major Slavic language beyond the minimum required for the M.A.; reading knowledge of one Slavic language from each of the other two branches and of German, French, or another research language with departmental approval.

Qualifying Examination

Three written examinations. One will cover all aspects of Slavic linguistics based on the student's coursework. The second and third examinations will be in two different specialized areas of Slavic linguistics, with topics and deadlines worked out together with the student's faculty advisor. While the specialized exams are ordinarily expected to include one topic from Slavic synchronic linguistics and another from Slavic diachronic linguistics, they may be both synchronic or both diachronic so long as the general areas are different.

All three examinations are to be taken within two successive semesters. The general examination is a scheduled written exam, while the second and third will typically be research quality papers written within a period of no more than 10 days. When all have been passed, an oral examination will be given shortly thereafter. In the semester following the oral qualifying exam, a candidate is required to submit to all members of his/her committee a dissertation prospectus.

Faculty

Chairperson
Professor Steven Franks*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Henry R. Cooper Jr.*, Ronald F. Feldstein*, Steven Franks*, Howard H. Keller (Emeritus), Nina Perlina* (Emerita), Bronislava Volková* (Emerita)

Associate Professors

Andrew R. Durkin* (Emeritus), George H. Fowler*, Dodona I. Kiziria (Emerita), Vadim Liapunov* (Emeritus)

Assistant Professors

Justyna Beinek*

Adjunct Professors

Dov-Ber Kerler*, Bill Johnston*

Adjunct Assistant Professor

Joshua S. Malitsky

Visiting Scholars

Bogdan Rakic (Affiliate Member), Anita Peti-Stantic (Fulbright visitor)

Courses

Graduate Russian

SLAV–R 401 Advanced Russian I (3 cr.) P: Grade of B or higher in R302. Refinement of active and passive language skills, with emphasis on vocabulary building and word usage. Extensive reading, discussion, composition writing. Individualized remedial drill in grammar and

pronunciation aimed at preparing students to meet departmental language proficiency standards.

SLAV–R 402 Advanced Russian II (3 cr.) P: Grade of B or higher in R401. Refinement of active and passive language skills, with emphasis on vocabulary building and word usage. Extensive reading, discussion, composition writing. Individualized remedial drill in grammar and pronunciation aimed at preparing students to meet departmental language proficiency standards.

SLAV–R 403 Russian Phonetics (3 cr.)

SLAV–R 405 Readings in Russian Literature I (3 cr.) May not be used for credit toward graduate degree in the department.

SLAV–R 406 Readings in Russian Literature II (3 cr.) May not be used for credit toward graduate degree in the department.

SLAV–R 407 Readings in Russian Culture, History, Society I (3 cr.) P: R302 or equivalent. C: R401 or consent of department. Extensive translation from the original of selected works on Russian history, government, music, folklore, geography, culture. Discussion of both linguistic problems and content.

SLAV–R 408 Readings in Russian Culture, History, Society II (3 cr.) P: R302 or equivalent. C: R402. Extensive translation from the original of selected works on Russian history, government, music, folklore, geography, culture. Discussion of both linguistic problems and content.

SLAV–R 491 Russian for Graduate Students I (3 cr.) Graduate credit not given.

SLAV–R 492 Russian for Graduate Students II (3 cr.) Graduate credit not given.

SLAV–R 501 Advanced Russian Syntax and Stylistics I (3 cr.)

SLAV–R 502 Advanced Russian Syntax and Stylistics II (3 cr.)

SLAV–R 570 Political Russian (3 cr.) The course is planned for advanced Russian students who are oriented toward and involved in research of economics and politics of the former Soviet Union. In particular, this course would target graduate students in the REEI.

SLAV–R 592 Methods of Russian Language Instruction (3 cr.) Methods of teaching Russian. The course will deal with all methods currently in use in foreign language pedagogy, with emphasis on proficiency-oriented teaching as applied to Russian. Review of Russian textbooks and video materials. Design and preparation of syllabi and development of lesson plans. Required for Slavics AIs.

Russian Literature

SLAV–R 503 Old Russian Literature (3 cr.) Lectures and readings in the original of Old Russian literary works from the eleventh to the seventeenth centuries.

SLAV–R 504 Eighteenth-Century Russian Literature (3 cr.) Russian intellectual life during the century of Russia's Europeanization; philosophical, religious, aesthetic, and social problems revealed in the writings of leading Russian authors of the century.

SLAV–R 505 Nineteenth-Century Russian Literature I (3 cr.) Development of Russian prose from Sentimentalism and Romanticism through Realism, with a focus on analysis of primary sources and original texts, to discover narrative and aesthetic principles and practices of major writers of the century.

SLAV–R 506 Nineteenth-Century Russian Literature II (3 cr.) Development of Russian prose from Sentimentalism and Romanticism through Realism, with a focus on analysis of primary sources and original texts, to discover narrative and aesthetic principles and practices of major writers of the century.

SLAV–R 507 Twentieth-Century Russian Literature I (3 cr.) Principal literary movements, major literary works from Symbolism through the Revolution and the Soviet period, culminating in the writing of the Perestroika period.

SLAV–R 508 Twentieth-Century Russian Literature II (3 cr.) Principal literary movements, major literary works from Symbolism through the Revolution and the Soviet period, culminating in the writing of the Perestroika period.

SLAV–R 520 Twentieth-Century Russian Author: (name variable) (3 cr.) Thorough investigation of the oeuvre of one or several twentieth-century Russian author(s).

SLAV–R 530 Pushkin (3 cr.)

SLAV–R 531 Gogol (3 cr.)

SLAV–R 532 Dostoevsky (3 cr.)

SLAV–R 533 Tolstoy (3 cr.)

SLAV–R 534 Tolstoy and Dostoevsky (3 cr.) Introduction to the masterworks of Leo Tolstoy and Feodor Dostoevsky. Discussions focus on four major novels; in addition, students read several important short stories and novellas by each author. Lectures in English; readings may be done in English or Russian.

SLAV–R 535 Chekhov (3 cr.)

SLAV–R 545 Jewish Characters in Russian Literature (3 cr.) Approaches the "Jewish Question," the identity and self-identity of Jewish characters from the standpoints of literary analyses, cultural ethnography, folklore and religious studies, and social and political history. Literary works of major nineteenth- and twentieth-century Russian writers provide the primary sources for the discussions.

SLAV–R 563 Pushkin to Dostoevsky (3 cr.)

SLAV–R 564 Tolstoy to Solzhenitsyn (3 cr.)

Genre Courses

SLAV–R 550 Russian Drama (3 cr.) Development of Russian drama from the end of the eighteenth century to the present. Knowledge of Russian not required, but students knowing Russian will be expected to read varying amounts in the original.

SLAV–R 551 Russian Poetry (3 cr.) Metrical and thematic developments in Russian poetry against

aesthetic and philosophical background. Major works read in the original.

SLAV–R 552 Russian and Soviet Film (3 cr.) Development of Russian cinematography from 1915 to the present. The characteristic features of Soviet films; the theory and practice of filmmaking in the Soviet Union; the Soviet cinema in its relationship to Russian literature, in the larger context of European Cinema Art.

SLAV–R 553 Central European Cinema (3 cr.) Emphasizes broad cultural approach to the subject of Central European cinema. Highlights the major developments of cinema in Poland, Hungary, Bulgaria, and the former Republics of Czechoslovakia and Yugoslavia in the post-Stalin era. The course will be divided into four segments, each dealing with a separate theme.

Theory

SLAV–R 500 Proseminar in Russian Literature (3 cr.) Designed as an introduction to graduate study in Russian literature, research methods, sources. History of Slavic scholarship. Required of all graduate literature majors, in first or second semester of study.

SLAV–R 598 Literary Theory in its Russian and East European Context (3 cr.) Advanced survey of literary theories originating in the Slavic world (Formalism, Bakhtin, Tartu School, etc.) and their interaction with western literary theories.

SLAV–L 599 Prague School Linguistics and Poetics (3 cr.) P: Interest in theory. An interdisciplinary introduction into linguistics, semiotics, and literary theory based on the methodology of the Prague School. Gives students tools with which to approach analysis in any of these areas. Also included are theories of theater, folklore, and visual arts.

Seminar

SLAV–R 601 Seminar in Russian Literature (1–6 cr.) Subject to vary. Intensive study of an author, a period, or a literary movement. Research papers required.

Synchronic

SLAV–L 501 Structure of Russian I: Phonology and Morphology (3 cr.) Introduction to graduate study in Slavic linguistics. Survey of the field. Research sources. Basic concepts of diachronic linguistics. Introduction to synchronic linguistic theory: Bloomfield, Chomsky, Jakobson.

SLAV–L 501 Structure of Russian I: Phonology and Morphology (3 cr.) Introduction to graduate study in Slavic linguistics. Survey of the field. Research sources. Basic concepts of diachronic linguistics. Introduction to synchronic linguistic theory: Bloomfield, Chomsky, Jakobson.

SLAV–L 502 Structure of Russian II: Syntax and Semantics (3 cr.) P: L501 or consent of instructor. Introduction to the syntactic and semantic structure of contemporary standard Russian.

SLAV–L 503 Russian Word Formation (3 cr.) P: L501. Survey of principles of word formation in Russian. Discussion of formal (morphophonemic) rules governing prefixation, suffixation, and compounding; productive vs. non-productive processes; and the semantics of derived words.

SLAV–L 504 Comparative Slavic Morphosyntax (3 cr.) Selected topics in the morphosyntax of Slavic languages will be examined from a comparative perspective. Introduces students both to modern generative grammar and to a range of relevant problems posed by Slavic.

SLAV–L 505 Structure and History of a Slavic Language (3 cr.) Synchronic and diachronic analysis of a single Slavic language (usually of language not regularly taught in department), including developmental trends and dialects. Will attempt to provide rapid facility for reading texts (especially linguistic), by building on student's knowledge of Russian.

SLAV–L 599 Prague School Linguistics and Poetics (3 cr.) P: Interest in theory. An interdisciplinary introduction into linguistics, semiotics, and literary theory based on the methodology of the Prague School. Gives students tools with which to approach analysis in any of these areas. Also included are theory of theater, folklore, and visual arts.

Diachronic

SLAV–L 571 Old Church Slavonic (3 cr.) History and grammar of Old Church Slavonic; alphabet, sound system, morphology, and elements of syntax. Reading of Old Church Slavonic texts.

SLAV–L 572 Comparative Slavic (3 cr.) A comparative survey of the Slavic languages and their historical development.

SLAV–L 573 History of East Slavic (3 cr.) Survey of East Slavic phonology from Common Slavic to the present. Dialectal divergence in Old Russian and formation of Great Russian, Ukrainian, and Belorussian as literary languages.

SLAV–L 574 History of South Slavic (3 cr.) Since Common Slavic period. Phonemic and morphological divergences within Southern Slavic language group. Formation of Southern Slavic literary languages, with emphasis on history of Serbo-Croatian and Bulgarian.

SLAV–L 575 History of West Slavic (3 cr.) Since Common Slavic period. Formation of Western Slavic literary languages, with emphasis on the history of Polish and Czech. Development of Polish and Czech phonemic systems and their dialectal differentiation.

SLAV–L 576 History of the Russian Literary Language (3 cr.) Since Common Slavic period. Formation of Western Slavic literary languages, with emphasis on the history of Polish and Czech. Development of Polish and Czech phonemic systems and their dialectal differentiation.

Seminar

SLAV–L 600 Proseminar in Slavic Linguistics (3 cr.) Introduction to the profession of Slavic linguistics. Emphasis on linguistic argumentation, research methods, sources, and critical reasoning. Exposure to a range approaches to Slavic linguistics and practical training in research methodology and scholarly argumentation. Preparation for doctoral program admissions examination.

SLAV–L 601 Seminar in Synchronic Slavic Linguistics (1–6 cr.) Detailed investigation of one or more specialized areas of synchronic Slavic linguistics.

SLAV–L 602 Seminar in Diachronic Slavic Linguistics (1–6 cr.) Detailed investigation of one or more aspects of Slavic historical linguistics (e.g., historical phonology, morphophonology, morphology, syntax). Examination of general theories and specific issues, complex problems, and controversial or innovative solutions.

SLAV–L 603 Topics in Slavic Linguistics (1–6 cr.)

Albanian

SLAV–A 511 Intensive Elementary Albanian I (5 cr.) No previous knowledge of Albanian required. Introduction of basic structure of contemporary Albanian language and culture, reading and discussion of basic texts

SLAV–A 512 Intensive Elementary Albanian II (5 cr.) No previous knowledge of Albanian required. Introduction of basic structure of contemporary Albanian language and culture, reading and discussion of basic texts.

Czech Sovak

SLAV–C 501 Elementary Czech I (3 cr.)

SLAV–C 502 Elementary Czech II (3 cr.)

SLAV–C 503 Intermediate Czech I (3 cr.)

SLAV–C 504 Intermediate Czech II (3 cr.)

SLAV–C 505 Advanced Intermediate Czech I (3-3 cr.) Development of oral and written fluency and comprehension in Czech language.

SLAV–C 506 Advanced Intermediate Czech II (3 cr.) Development of oral and written fluency and comprehension in Czech language based on morphological, lexical, and syntactical analysis of contemporary textual materials.

SLAV–C 511 Intensive Elementary Czech I (5 cr.) A history of the Czech lands and their art, literature, and music from the ninth through the late nineteenth centuries. Instruction on Slovak history; literature and language included.

SLAV–C 512 Intensive Elementary Czech II (5 cr.) A history of the Czech lands and their art, literature, and music from the ninth through the late nineteenth centuries. Instruction on Slovak history; literature and language included.

SLAV–C 513 Intensive Intermediate Czech I (5 cr.) A history of the Czech lands and their art, literature, and music from the ninth through the late nineteenth centuries. Instruction on Slovak history; literature and language included.

SLAV–C 514 Intensive Intermediate Czech II (5 cr.) A history of the Czech lands and their art, literature, and music from the ninth through the late nineteenth centuries. Instruction on Slovak history; literature and language included.

SLAV–C 563 History of Czech Literature and Culture (3 cr.) A history of the Czech lands and their art, literature, and music from the ninth through the late nineteenth centuries. Instruction on Slovak history; literature and language included.

SLAV–C 564 Modern Czech Literature and Culture (5 cr.) Survey of literary, cultural, historical, and political developments from the late nineteenth century through the present. Slovak culture and émigré literature is also covered.

SLAV–C 565 Seminar in Czech Literature and Culture (3 cr.) Intensive study of an author, a period, or a literary or cultural development. Research papers required. May be repeated for credit when topic varies.

SLAV–V 501 Elementary Slovak I (3 cr.)

SLAV–V 502 Elementary Slovak II (3 cr.)

Polish

SLAV–P 501 Elementary Polish I (3 cr.)

SLAV–P 502 Elementary Polish II (3 cr.)

SLAV–P 503 Intermediate Polish I (3 cr.)

SLAV–P 504 Intermediate Polish II (3 cr.)

SLAV–P 505 Advanced Intermediate Polish I (3 cr.)

SLAV–P 506 Advanced Intermediate Polish II (3 cr.)

SLAV–P 511 Intensive Elementary Polish I (5 cr.)

SLAV–P 512 Intensive Elementary Polish II (5 cr.)

SLAV–P 513 Intensive Intermediate Polish I (5 cr.)

SLAV–P 514 Intensive Intermediate Polish II (5 cr.)

SLAV–P 563 Survey of Polish Literature and Culture I (3 cr.) Polish literature from its origins to the end of the eighteenth century.

SLAV–P 564 Survey of Polish Literature and Culture II (3 cr.) Polish literature of the nineteenth and twentieth centuries.

SLAV–P 565 Seminar in Polish Literature and Culture: (variable title) (3 cr.) Intensive study of an author, a period, or a literary or cultural development. Research papers required. May be repeated for credit when topic varies.

SLAV–P 566 Seminar in Polish Literature and Culture: (variable title) (3 cr.) Explores the post-war history of Polish cinema, made famous worldwide by directors such as Wajda, Kieslowski, and Polanski. Topics of interest: “the cinema of moral anxiety” (1970), absurd comedies that depicted life under communism, adaptations of literary classics, new topics and genres in Polish film after 1989.

Romanian

SLAV–M 501 Elementary Romanian I (3 cr.)

SLAV–M 502 Elementary Romanian II (3 cr.)

SLAV–M 503 Intermediate Romanian I (3 cr.)

SLAV–M 504 Intermediate Romanian II (3 cr.)

SLAV–M 511 Intensive Elementary Romanian I (5 cr.)

SLAV–M 512 Intensive Elementary Romanian II (5 cr.)

SLAV–M 513 Intensive Intermediate Romanian I (5 cr.)

SLAV–M 514 Intensive Intermediate Romanian II (5 cr.)

SLAV–M 565 Individual Readings in Romanian Language and Literature (arr. cr.)

South Slavic

SLAV–B 501 Elementary Bulgarian I (3 cr.)

SLAV–B 502 Elementary Bulgarian II (3 cr.)

SLAV–B 601 Introduction to Bulgarian (3 cr.) P: Knowledge of another Slavic language or consent of instructor. Introduction to basic morphology and syntax of Bulgarian.

SLAV–G 501 Elementary Georgian I (3 cr.)

SLAV–G 502 Elementary Georgian II (3 cr.)

SLAV–G 511 Intensive Elementary Georgian I (5 cr.)

SLAV–G 512 Intensive Elementary Georgian II (5 cr.) P: Consent of instructor. Phonology, morphology, and syntax of the Slovene language. For reading knowledge.

SLAV–K 501 Elementary Slovene I (3 cr.)

SLAV–K 502 Elementary Slovene II (3 cr.)

SLAV–K 601 Introduction to Slovene (3 cr.) P: Consent of instructor. Phonology, morphology, and syntax of the Slovene language. For reading knowledge.

SLAV–Q 501 Elementary Macedonian I (3 cr.) No previous knowledge of Macedonian language required. Introduction to basic structure of contemporary Macedonian and the culture of Macedonia. Reading and discussion of basic texts. Credit given for only one of the following: Q101, Q311, Q511, Q501.

SLAV–Q 502 Elementary Macedonian II (3 cr.) No previous knowledge of Macedonian required. Introduction to basic structure of contemporary Macedonian and the culture of Macedonia. Reading and discussion of basic texts. Credit given for only one of the following: Q102, Q312, Q502, Q512.

SLAV–Q 503 Intermediate Macedonian I (3 cr.) P: Q502 or permission of instructor. Intermediate Macedonian is a continuation of Elementary Macedonian and will further develop the students' proficiency in Macedonian by focusing equally on reading, listening, writing, speaking as well as grammar and culture.

SLAV–Q 504 Intermediate Macedonian II (3 cr.) P: Q503 or permission of instructor. Intermediate Macedonian is a continuation of Elementary Macedonian and will further develop the students' proficiency in Macedonian by focusing equally on reading, listening, writing, speaking as well as grammar and culture.

SLAV–S 501 Elementary Serbian and Croatian I (3 cr.)

SLAV–S 502 Intermediate Serbian and Croatian II (3 cr.)

SLAV–S 503 Intermediate Serbian and Croatian I (3 cr.)

SLAV–S 504 Intermediate Serbian and Croatian II (3 cr.)

SLAV–S 505 Advanced Intermediate I Serbian and Croation I (3 cr.) P: S504 or equivalent proficiency. Reading of literary texts from a variety of periods and locations in the Bosnian-Croatian-Serbian speech area. Sequence of readings in original parallels syllabus of S563-S564 in translation. Review of grammar, syntax, and expansion of lexicon as needed.

SLAV–S 506 Advanced Intermediate Serbian and Croation II (3 cr.) P: S504 or equivalent proficiency. Reading of literary texts from a variety of periods and locations in the Bosnian-Croatian-Serbian speech area. Sequence of readings in original parallels syllabus of S563-S564 in translation. Review of grammar, syntax, and expansion of lexicon as needed.

SLAV–S 511 Intensive Elementary Croation/Serbian I (5 cr.) Survey of the cultures of the Slovenes, Croats, Serbs, Montenegrins, Bosnians, Macedonians, and Bulgarians from earliest times to the present. Reading and discussion of their major literary works in translation.

SLAV–S 512 Intensive Elementary Croation/Serbian II (5 cr.) Survey of the cultures of the Slovenes, Croats, Serbs, Montenegrins, Bosnians, Macedonians, and Bulgarians from earliest times to the present. Reading and discussion of their major literary works in translation.

SLAV–S 513 Intensive Intermiediate Croation/Serbian I (5 cr.) Survey of the cultures of the Slovenes, Croats, Serbs, Montenegrins, Bosnians, Macedonians, and Bulgarians from earliest times to the present. Reading and discussion of their major literary works in translation.

SLAV–S 514 Intensive Intermediate Croation/Serbian II (5 cr.) Survey of the cultures of the Slovenes, Croats, Serbs, Montenegrins, Bosnians, Macedonians, and Bulgarians from earliest times to the present. Reading and discussion of their major literary works in translation.

SLAV–S 563 Literature and Culture of the Southern Slavs I (3 cr.) Survey of the cultures of the Slovenes, Croats, Serbs, Montenegrins, Bosnians, Macedonians, and Bulgarians from earliest times to the present. Reading and discussion of their major literary works in translation.

SLAV–S 564 Literature and Culture of the Southern Slavs II (3 cr.) Survey of the cultures of the Slovenes, Croats, Serbs, Montenegrins, Bosnians, Macedonians, and Bulgarians from earliest times to the present. Reading and discussion of their major literary works in translation.

SLAV–S 565 Seminar in South Slavic Literatures (3 cr.) P: S563-S564 or consent of instructor. Intensive study of an author, a period, or a literary development. Research papers required.

SLAV–U 501 Elementary Ukrainian I (3 cr.) Introduction to basic structure of contemporary Ukrainian language and culture. No previous knowledge of Ukrainian is required.

SLAV–U 502 Elementary Ukrainian II (3 cr.) Introduction to basic structure of contemporary Ukrainian language and culture. No previous knowledge of Ukrainian is required.

SLAV–U 582 Ukrainian through Russian (3 cr.) An accelerated Ukrainian language course for those who have previous experience with another Slavic language. The course cover at least one year's worth of basic Ukrainian

SLAV–U 601 Introduction to Ukrainian (3 cr.) P: Knowledge of another Slavic language or consent of

instructor. Introduction to basic morphology and syntax of Ukrainian.

General Slavic

SLAV–S 540 Graduate Readings in Slavic Studies (arr. cr.) This course is eligible for a deferred grade. Readings may be selected in any of the Slavic languages.

SLAV–S 560 Special Studies in Slavic Literature (3 cr.)

SLAV–S 562 Topics in Slavic Studies (1–3 cr.) Topics vary as needed and may be selected from any area of Slavic language, literature, or culture studies.

SLAV–S 801 Ph.D. Dissertation (arr. cr.) This course is eligible for a deferred grade.

Summer Workshop in Slavic and East European Languages

SLAV–R 431 Intensive Russian Oral (2 cr.)

SLAV–R 434 Intensive Russian Phonetics (1 cr.)

SLAV–W 507 Advanced Russian I (5 cr.) Intensive summer equivalent of R401 and R402.

SLAV–W 557 Advanced Russian II (5 cr.)

SLAV–W 508 Advanced Russian Syntax and Stylistics I (5 cr.) Intensive summer equivalent of R501 and R502.

SLAV–W 558 Advanced Russian Syntax/Stylistics II (5 cr.)

SLAV–W 509 Advanced Russian Syntax and Stylistics III (5 cr.) Intensive Russian at the sixth-year level.

SLAV–W 559 Advanced Russian Syntax/Stylistics IV (5 cr.)

Other

SLAV–U 511 Intensive Elementary Ukrainian I (5 cr.) No previous knowledge of Ukrainian required. First semester designed to provide active command of phonology and basic grammatical patterns of Ukrainian.

SLAV–U 512 Intensive Elementary Ukrainian II (5 cr.) P: U511 or U501 or equivalent proficiency. Continuation of U511, designed to provide active command of phonology and basic grammatical patterns.

SLAV–U 513 Intensive Intermediate Ukrainian I (5 cr.) P: U512 or permission of instructor. Continuation of work in structure and vocabulary acquisition through grammar study, drills, readings; oral practice and written exercises.

SLAV–U 514 Intensive Intermediate Ukrainian II (5 cr.) P: U513 or permission of instructor. Continuation of work in structure and vocabulary acquisition through grammar study, drills, readings; oral practice and written exercises.

Social Informatics

School of Library and Information Science

Departmental URL: rkcsi.indiana.edu/

Curriculum

Curriculum Courses Faculty

Ph.D. Minor in Social Informatics

Social Informatics (SI) refers to the interdisciplinary study of the design, uses, and consequences of information and communications technologies (ICT) that takes into account their interaction with institutional and cultural contexts. Social Informatics research examines the roles of technologies in social and organizational change and the social shaping of ICT. SI research and SI courses are organized within diverse fields, including information systems, telecommunications, journalism, information science, and political science. One key goal of the field is to shape ICTs and policies relevant to them in order to enhance human communication and lead to more acceptable technological developments at organizational and social levels.

Course Requirement for the Ph.D. Minor in Social Informatics (12 credit hours)

This minor consists of four courses (12 credits), selected from an approved list of courses as described below. Please note that a student minoring in SI cannot include classes from his or her home department in the minor. Students who complete the Ph.D. minor in SI at Indiana University must demonstrate proficiency in a set of courses that examines the design, uses, consequences and/or policies of ICT use in social, cultural, or institutional contexts. The SI Ph.D. minor emphasizes theoretical and methodological issues, as well as substantive issues.

The student must submit a written proposal to the Steering Committee describing a detailed course of study. The proposal will explain the student's focus of study, its relationship to SI, the relationship of proposed SI courses to the overall program of study, and the likely dissertation topic or area. It will also include the name of the student's SI Ph.D. minor advisor. While the SI Ph.D. minor is likely to be completed before a student develops a detailed dissertation proposal, it is expected that the dissertation will address issues related to social informatics. If a student is interested in a course that is not on the approved course list, he or she can petition the director and Steering Committee to have the course included as part of the minor; the procedure is described below.

The complete proposal must be approved by the Steering Committee. The Steering Committee must also attest that the approved course of study has been completed successfully. Students seeking the Ph.D. minor in SI must obtain the approval of their Ph.D. Advisory Committees. The range of courses listed on the RKCSI courses at http://rkcsi.indiana.edu/index.php/courses is designed to enable students to construct a program for the Ph.D. minor in SI that is relevant to their primary research interests. This program of courses should include some courses that have strong theoretical and/or methodological content, as well as substantive issues. Students who propose taking "topics courses" (such as SLIS S604, S601/602, INFO I590, R601) as electives to help satisfy these requirements must satisfy the Steering Committee

that the particular course they wish to take is relevant to the subject matter of SI. Further courses will be added to the list on an ongoing basis at the discretion of the Steering Committee.

Faculty

Steering Committee Members

Dr. Alice Robbin (School of Library & Information Science), Dr. Alan Dennis (Kelley School of Business), Dr. Harmeet Sawhney (Department of Telecommunications), and Dr. Kalpana Shankar (School of Informatics).

Core Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Katy Börner* (School of Library and Information Science), Blaise Cronin* (School of Library and Information Science), Alan Dennis* (Kelley School of Business), Thomas Duffy* (School of Education), Jeffrey Hart* (Political Science), Susan Herring* (School of Library and Information Science), Anne Massey* (Kelley School of Business), Christine Ogan* (Emerita, School of Journalism, School of Informatics), Harmeet Sawhney* (Telecommunications)

Associate Professors

Erik Bucy* (Telecommunications), Alice Robbin* (School of Library and Information Science), Howard Rosenbaum* (School of Library and Information Science)

Courses

Specific Course Requirements

Students seeking a Ph.D. minor in Social Informatics must complete four graduate level courses (12 hours) that have been selected from the courses listed on the RKCSI Courses at Indiana page; this list includes courses that have been specifically identified as approved for the Ph.D. minor. One of the four courses for the SI minor must be taken in the School of Journalism, the Department of Telecommunications, the School of Informatics and Computing, or the School of Library and Information Science and this course, which will serve as a foundation course for the minor, must be approved by the committee. This course should be taken first and may not be in the student's home school or department. Other courses in these schools and departments may be taken as electives. Possibilities include:

School of Journalism
J530 Issues in New Communication Technologies
J614 Communication and National Development

School of Library and Information Science
S514 Computerization in Society
S518 Communication in Electronic Environments

Telecommunications Department
T551 Communication, Technology, and Society
T601 Origins of the Information Age

School of Informatics and Computing
I503 Social Impact of Information Technologies

In addition, students can propose, in consultation with their advisors, that their minor include other SI courses that are not on this list or that are on the list, but have not yet been formally approved for the SI minor. Such proposals should include syllabi and other detailed information about the course. The proposal should make a convincing case that the course is aligned with one or more main SI themes, such as the complex relationships among technology, people, their work and/or play, and the contexts within which people interact with technology.

Electives

Students seeking the Ph.D. minor in social informatics must complete an additional three courses (9 credit hours). These additional courses must be selected from the list above or the following list. The elective courses should be taken from at least two departments or schools other than the student's home academic unit. The Social Informatics Program is developing rapidly at IU, and we expect that additional doctoral-level courses will be offered each year. Students can propose that their minors include other social informatics courses that are not included on this list. Such proposals should include syllabi and other detailed information about the course.

School of Library and Information Science
S513 Organizational Informatics
S541 Information Policy
S542 International Information Issues
S544 Gender and Computerization
S643 The Information Industry
S652 Digital Libraries
S661 Concepts and Contemporary Issues in Human-Computer Interaction

Kelley School of Business
S600 Foundations in Information Systems Research
S602 Information Systems Technology Research
S606 IS Strategy and Management Research
S607 Collaborative Technologies Research
S796 Special Topics

Cognitive Science Program
Q540 Philosophical Foundations of the Cognitive and Information Sciences

Department of Communication and Culture
CMCL 620: Media, Politics, and Power: Ethnographic Approaches to New Media: Configuring the Object of Analysis in New Media Research

School of Education
P550 Cognition and Semiotics

School of Informatics and Computing
I605 Social Foundations of Informatics
I690 Seminar in Social Informatics II: Political and Economic Issues

Department of Political Science
Y665 Public Law and Policy

Department of Telecommunications
T602 Interactivity and New Media
T610 The Networked Society

Social Science Approaches to Health and Healing Systems (SAHS)

College of Arts and Sciences

Departmental E-mail: pescosol@indiana.edu

Curriculum

Ph.D. Minor in Social Science Approaches to Health and Healing Systems (SAHS)

The SAHS minor is a cross-departmental/school/campus program open to Ph.D. students at Indiana University (IUB and IUPUI campuses). It requires four courses (a minimum of 12 credit hours) from the approved list, including at least one of the following: S660 (Medical Sociology and Social Psychiatry, Part I or II, offered at IUB), SOC R515 (Sociology of Health and Illness, offered at IUPUI), or SOC R585 (Social Aspects of Mental Health and Mental Illness, offered at IUPUI). Courses outside the currently approved list may be considered for the minor in consultation with the director. One of the courses included as part of the minor program may be from the student's disciplinary major. The minor is administered by the Department of Sociology, IUB. Interested students should consult with the director of the minor to develop a course plan.

Faculty

Director

Professor Bernice Pescosolido*

Core Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Bernice Pescosolido* (Sociology, IUB)

Chancellor's Professor

Mohammed R. Torabi* (Applied Health Science, IUB)

Robert A. Lucas Professor Emeritus

Roger Dworkin* (Law, IUB)

Professors

Ellen Dwyer* (History, Criminal Justice, IUB), Peter Finn* (Psychological and Brain Sciences, IUB), Carol Brooks Gardner* (Sociology, IUPUI), Pamela Braboy Jackson* (Sociology, IUB), Paul Jamison* (Emeritus, Anthropology, IUB), Lloyd Kolbe* (Applied Health Science, IUB), John McGrew (Psychology, IUPUI), Jane McLeod* (Sociology, IUB), Brian O'Donnell* (Psychological and Brain Sciences, IUB), Eliza Pavalko* (Sociology, IUB), Steven Stowe* (History, IUB), Peggy A. Thoits (Sociology, IUB), Virginia Vitzthum (Anthropology, IUB), Richard Ward* (Anthropology, IUPUI), Andrea Wiley (Anthropology, IUB), Eric Wright* (Public and Environmental Affairs, IUPUI), William Yarber* (Applied Health Science, IUB)

Associate Professors

Silvia Bigatti (Department of Public Health, IUPUI), Nancy Ellis* (Applied Health Science, IUB), William P. Gronfein (Sociology, IUPUI), Ann Holmes* (Public and Environmental Affairs, IUPUI), Susan Middlestadt* (Applied Health Science, IUB), Sarah D. Phillips* (Anthropology, IUB), Michael Reece* (Applied Health Science, IUB)

Assistant Professors

Zobeida Bonilla (Applied Health Science, IUB), Brian D'Onofrio* (Psychological and Brain Sciences, IUB), , Frederika Kaestle* (Anthropology, IUB), Michael Muehlenbein* (Anthropology, IUB), Fernando Ona (Applied Health Science, IUB), Kevin Rand (Psychology, IUPUI), Jesse Stewart (Psychology, IUPUI)

Clinical Associate Professor

Catherine Sherwood-Laughlin (Applied Health Science, IUB)

Clinical Assistant Professors

Lesa Lorenzen-Huber (Applied Health Science, IUB)

Courses

Curriculum Courses Faculty

Cross-Listed Courses

Anthropology

B480 Human Growth and Development (3 cr.) IUB and IUPUI
B512 Evolutionary Medicine (3 cr.)
B540 Hormones and Human Behavior (3 cr.)
B543 Reproductive Ecology (3 cr.)
B544 Women's Bodies (3 cr.)
B545 Nutritional Anthropology (3 cr.)
B548 Human Demography and Life History (3 cr.)
B570 Human Adaptation: Biological Approaches (3 cr.)
E445/645 Advanced Seminar in Medical Anthropology (3 cr.) IUB and IUPUI

Applied Health Science

C501 Assessment and Planning in Public Health (3 cr.)
C505 Public Health Foundations and Leadership (3 cr.)
C510 Organization and Administration of Public Health Programs (3 cr.)
C512 Environmental Health Science (3 cr.)
C525 Health Information Systems, Technology, and Aging (3 cr.)
C529 Health and Disease Disparities in Diverse Communities (3 cr.)
C535 Contemporary Issues in Aging and Health (3 cr.)
C589 Models and Theories of Health Behavior (3 cr.)
C602 Intervention Design in Public Health (3 cr.)
C611 Epidemiology (3 cr.)
C615 Health, Longevity, and Integrative Therapies for the Later Years (3 cr.)
H500 Philosophy and Principles of Health Education (3 cr.) H517 Health Care in Minority Communities (3 cr.)
H522 Promoting Women's Health (3 cr.)
H524 Gerontology: Multidisciplinary Perspectives (3 cr.)
H530 International Health (3 cr.)
H555 Issues in Human Sexuality and Health (3 cr.)
H594 Health Program Evaluation (3 cr.)

Criminal Justice

P680 Law and Psychiatry (3 cr.)

Economics

E528 Economic Analysis of Health Care (3 cr.) IUPUI

Law
B619 Law and Medicine (3 cr.) permission of instructor and minor director required
B661 Law and Biomedical Advance (3 cr.) permission of instructor and minor director required

Psychology
I545 Psychopharmacology (3 cr.) IUPUI
I555 Medical and Psychosocial Aspects of Chronic Illness (3 cr.) IUPUI
I591 Psychopathology (3 cr.) IUPUI
I614 Behavioral Medicine (3 cr.) IUPUI
I618 Interventions in Health Psychology (3 cr.) IUPUI
P624 Principles of Psychopathology (3 cr.) permission of instructor required
P657 Topical Seminar (3 cr.) permission of director required for specific sections
P667 Neuropsychopharmacology (3 cr.)

School of Public and Environmental Affairs
H501 U.S. Health Care Systems, Policies and Ethical Challenges (3 cr.) IUPUI
H514 Health Economics (3 cr.) IUPUI
H515 Seminar in Health Policy (3 cr.) IUPUI
H516 Health Services Delivery and the Law (3 cr.) IUPUI
H521 Management Science for Health Services Administration (3 cr.) IUPUI
H615 Health Care Outcomes and Decision-Making (3 cr.) IUPUI
V541 Benefit-Cost Analysis of Public and Environmental Policies (3 cr.) IUPUI

Sociology
R515 Sociology of Health and Illness (3 cr.) IUPUI
R585 Social Aspects of Mental Health and Mental Illness (3 cr.) IUPUI
S526 The Sociology of Human Sexuality (3 cr.) IUPUI
S660 Advanced Topics (3 cr.)

Social Studies

Departmental URL: www.indiana.edu/~socstud

Departmental E-mail: kcbarton@indiana.edu

Curriculum

Director

Professor Keith C. Barton*, 3234 Wright Education, (812) 856-8058

Academic Advisor

Jeane Novotny, 4274 Wright Education, (812) 856-8584, jnovotny@indiana.edu

Degree Offered

Master of Arts for Teachers

This program is for students enrolled in a teacher certification program who also wish to pursue a masters degree. Students who already possess a teaching license may also enroll in this program. Teaching certification is required in order to receive this degree, but the M.A.T. program does not directly lead to Indiana teaching certification. Courses are selected from offerings in the School of Education and the College of Arts and Sciences.

Special Program Requirements

Additional coursework and experiences are necessary in order to obtain certification. Please contact the Program Director for more information. See also general University Graduate School requirements.

Master of Arts for Teachers Degree

Admission Requirements

Bachelor's degree, with at least 18 credit hours in the social sciences, including history.

Course Requirements

A total of 36 credit hours, including 24 credit hours in three of the following departments: economics, geography, history, political science, psychology, and sociology. At least 12 credit hours must be in one department, the other 12 credit hours divided as equally as possible between two other departments. Remaining credit hours are in the above departments or in the School of Education. Course **EDUC J653** and **EDUC S519** are highly recommended.

Courses

EDUC–J 653 The Nature of Social Studies (3 cr.) Exploration of the relationships among history, the social sciences, and social studies in elementary and secondary schools.

EDUC–M 514 Workshop in Social Studies Education (1–6 cr.) Special topics in methods and materials for improving the teaching of social studies in middle, junior high, and high school.

EDUC–M 590 Independent Study in Social Studies Education (1–3 cr.) P: Individual research or study with a Social Studies Education faculty member, arranged in advance of registration. A one- or two-page written proposal should be submitted to the instructor during the first week of the term specifying the scope of the project, project activities, meeting times, completion date, and student products. Ordinarily, M590 should not be used for the study of material taught in a regularly scheduled course.

EDUC–M 519 Advanced Study in the Teaching of Secondary School Social Studies (3–3 cr.) Completion of an undergraduate methods course and teaching experience, or consent of instructor. Re-studying the purposes of high school social studies, evaluating recent developments in content and instructional procedures, and developing social studies programs for specific school situations.

Sociology

College of Arts and Sciences

Departmental E-mail: socinfo@indiana.edu

Departmental URL: www.indiana.edu/~soc

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission Requirements

Fifteen credit hours in sociology with a 3.3 (B+) grade point average (may be waived for students with a strong undergraduate record in another field); satisfactory scores on the Graduate Record Examination General Test; three letters of recommendation.

Course Requirements

A total of 30 credit hours, including 6 credit hours of the Sociological Research Practicum (S566 and either S567 or S569), S554, and either S510 or S530. An introductory undergraduate statistics course, such as S371, is a prerequisite for S554.

Grades

Students must maintain a grade point average of at least 3.3 (B+) in all course work. No grade below B– in sociology courses will be counted toward this degree.

Essay

The essay requirement is fulfilled by enrollment and participation in S566 and either S567 or S569 and preparation of an acceptable research paper.

Doctor of Philosophy Degree

Admission Requirements

Completion of the M.A. degree (or equivalent training) in sociology at a recognized institution with a grade point average of 3.3 (B+) or higher (students with a master's degree in a related field may be admitted, but may be required to remove deficiencies), three letters of recommendation, and satisfactory scores on the Graduate Record Examination General Test.

Course Requirements

A total of 90 credit hours, consisting of no fewer than 60 credit hours of course work (including the 30 credit hours counting toward the M.A.) and up to 30 credit hours of dissertation research (S869). The required courses are those specified for the M.A. (including both S510 and S530), S540, S558, S650, one advanced methodology course, three 600-level courses, one 700-level seminar, and two elective courses.

Grades

Students must maintain a grade point average of at least 3.3 (B+) in all course work. No grade below B– in sociology courses will be counted toward this degree.

Outside Minor

Required (usually 9-15 credit hours); may be chosen from African studies, African Americana, African Diaspora Studies, African Studies, Anthropology, East Asian Studies Center, Business, Cultural Studies, East Asian Studies, Economics, Education, Gender Studies, Geography, History, History and Philosophy of Science, Human Sexuality, Latin American and Caribbean Studies, Latino Studies, Law, Political Science, Public Affairs, Religious Studies, Russian and East European Studies, Social Science Approaches to Health and Healing Systems, Statistical Science or West European Studies. A field not listed may be chosen with approval of the director of graduate studies.

Qualifying Examinations

All doctoral students are expected to demonstrate proficiency in sociological methods either by achieving a GPA of 3.3 (B+) or above in the required statistics and methods course sequence (S554, S558, S650, one advanced methods course), or by passing a doctoral examination in methodology. In addition, students must pass a written qualifying exam in a research specialty of their choosing. This qualifying exam is to be completed by the start of the student's fourth year in the graduate program.

Dissertation Proposal

Students must pass an oral defense of their dissertation proposal.

Final Examination

Oral defense of the dissertation.

Ph.D. Minor in Sociology

Students from other departments or schools who wish to minor in sociology should consult with the director of graduate studies, who will ordinarily serve as the minor advisor. Students will be required to complete 12 credit hours of course work; these courses must be completed with a grade point average of at least 3.0 (B). No more than one course should be taken below the 500 level. These requirements may be modified in particular cases by the director of graduate studies.

Faculty

Chairperson

Professor Eliza Pavalko*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

J. Scott Long*, Bernice Pescosolido*, Sheldon Stryker* (Emeritus)

Allen and Polly Grimshaw Professor

Eliza Pavalko*

Chancellor's Professor

Robert Robinson*

Robert H. Shaffer Class of 1967 Endowed Professor

William A. Corsaro*

Rudy Professors

Clem Brooks*, Thomas F. Gieryn*, David Heise* (Emeritus), Brian Powell*, Pamela B. Walters*

Virginia L. Roberts Professor

Peggy Thoits*

Professors

Arthur Alderson, Robert Althauser* (Emeritus), Phillips Cutright* (Emeritus), Donna Jean Eder*, Allen Grimshaw* (Emeritus), Elton Jackson* (Emeritus), Pamela Braboy Jackson*, David R. James* (Emeritus), Jane D. McLeod*, Whitney Pope* (Emeritus), Robert Victor Robinson*, , Martin Weinberg*, David Zaret*

Associate Professors

Timothy William Bartley*, Laurel L. Cornell*, Timothy Paul Hallett*Patricia A. McManus*, Ethan Michelson, Brian Steensland*, Quincy Thomas Stewart

Assistant Professors

Stephen Benard, , Ho-fung Hung, Jennifer Lee,

Adjunct Professors

Kirsten Grønbjerg* (Public and Environmental Affairs)
Sylvia Martinez (Education)
David Reingold* (Public and Environmental Affairs)
John Stanfield (Afro American Studies)
Suzanna Walters* (Gender Studies)
Stanley Wasserman (Statistics)

Director of Graduate Studies
Associate Professor Patricia McManus, Ballantine Hall 842D, (812) 855-8970

Courses

SOC–S 409 Social Context of Schooling (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 410 Topics in Social Organization (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 413 Gender and Society (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 417 Conversation Analysis (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 419 Social Movements and Collective Action (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 420 Topics in Deviance (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 427 Social Conflict (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 431 Topics in Social Psychology (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 433 Adult Socialization (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 435 Social Psychology of the Self (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 438 Childhood Socialization (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 441 Topics in Social Theory (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 450 Topics in Methods and Measurement (3 cr.) Courses in the 400s listed here are open to graduate students with the prior approval of the director of graduate studies in sociology and the course instructor.

SOC–S 500 Pro-Seminar in Sociology (1 cr.) S/F grading. Introduction to current sociological research interests and concerns through the work of departmental members.

SOC–S 501 Sociology as a Vocation (1 cr.) S/F grading. Students consider the contributions of sociology as a discipline and examine career paths of sociologists both within and outside of academia. The 1 credit course is required of all first-year graduate students.

SOC–S 502 Launching Your Academic Career (1 cr.) In this course, students are introduced to basic issues that are essential for their professional development. Course time is divided between in-class discussions and exercises both in and outside of class. This one-credit course is required of all second-year students and is taken on a pass/fail basis.

SOC–S 506 Teaching of Undergraduate Sociology (3 cr.) S/F grading. Required of all associate instructors.

SOC–S 510 Introduction to Social Organization (3 cr.) P: One course in sociology. Concepts, perspectives, and theories relevant to the analysis of all social organizations or social systems. Emphasizes both dynamic processes and structural forms, including social roles and interaction, patterns of social ordering, effects of culture, and social systems analysis. Examines both classic and contemporary literature.

SOC–S 521 Sexual Diversity (3–9 cr.) A sociological examination of the major social-psychological and behavioral aspects of human sexual diversity.

SOC–S 522 Constructing Sexuality (3 cr.)

SOC–S 530 Introduction to Social Psychology (3–9 cr.) P: One course in sociology. Examines the broad range of work in social psychology. Emphasis is placed on the relation between the classic and contemporary literature in the field.

SOC–S 540 Sociological Theory (3 cr.) A rigorous examination of a representative set of theoretical products, with the objective of understanding the basic structure and meaning of each and simultaneously learning about the creation of theory.

SOC–S 554 Statistical Techniques in Sociology I (3 cr.) P: S371 or consent of instructor. Statistical analysis of single and multiple equation models with continuous dependent variables. May include techniques such as bivariate and multivariate regression, recursive and nonrecursive structural equation models.

SOC–S 558 Advanced Research Techniques (3 cr.) The logic of analysis, including development of research questions, relationships between theory and evidence, research design, sampling, data collection strategies, reliability and validity, measurement, analysis, and drawing conclusions. Also includes an overview of data collection techniques such as surveys, interviews, field methods, and the use of archival and secondary data.

SOC–S 560 Topics in Sociology (3 cr.) Selected topics in social organization and social psychology, including but not limited to the sociologies of work, sex roles, education, mental illness, science, sociolinguistics, socialization, deviance, sexual patterns and variations, and small group processes.

SOC–S 566 Sociological Research Practicum I (1–3 cr.) This course is eligible for a deferred grade. Participation in all aspects of a sociological research project, including conceptualization and design, data collection, analysis, and report writing.

SOC–S 567 Sociological Research Practicum II (1–3 cr.) This course is eligible for a deferred grade. Participation in all aspects of a sociological research project, including conceptualization and design, data collection, analysis, and report writing.

SOC–S 569 M.A. Thesis (3 cr.) This course is eligible for a deferred grade.

SOC–S 606 Sociological Issues in College Pedagogy (3 cr.) Introduction to topics such as learning theory, learning and teaching styles, and cognitive development. Focuses on assessment and practice of teaching, challenges to higher education, ethics, and professional responsibility.

SOC–S 610 Urban Sociology (3 cr.) Historical and contemporary causes, trends, and patterns of urbanization throughout the world. Various approaches to studying the process of urbanization, including ecological, social organizational, and political perspectives. Current developments and problems in urban planning.

SOC–S 612 Political Sociology (3 cr.) Possible topics include experimental studies of power relationships, political socialization, political attitudes, political participation, voting behavior, decision-making processes, theories of social power, organizational power systems and structures, the state as a social institution, and political movements.

SOC–S 613 Complex Organizations (3 cr.) Theory and research in formal organizations: industry, school, church, hospital, government, military, and university. Problems of bureaucracy and decision making in large-scale organizations. For students in the social sciences and professional schools interested in the comparative approach to problems of organization and their management.

SOC–S 615 Problems in Demography and Ecology (3 cr.) Sociological aspects of theories relating human beings and ecological environment. Selected topics, ranging from fertility and population change to community planning and urbanism in underdeveloped areas as well as Western cultures.

SOC–S 616 Sociology of Family Systems (3 cr.) Focus on the nature, structure, functions, and changes of family systems in modern and emerging societies, in comparative and historical perspective. Attention is given to relationships with other societal subsystems, and to interaction between role occupants within and between subsystems.

SOC–S 617 Social Stratification (3 cr.) Nature of social stratification; comparison of caste, estate-class, and open-class systems; theories of stratification; characteristics of local and national stratification systems; comparative analysis of stratification systems in various parts of the world; social circulation; changes in stratification structure.

SOC–S 618 Social Stratification (3 cr.) The nature of beliefs and value systems and their institutional arrangements, with specific attention to the interrelationship of these systems to the larger social structure, in cross-cultural and historical perspective.

SOC–S 620 Deviance and Social Control (3 cr.) Current theories of genesis, distribution, and control of deviant behavior. Theories about specific forms of deviant behavior, e.g., crime, suicide, and alcoholism, examined from standpoint of their implications for a comprehensive, general theory of deviant behavior.

SOC–S 621 Theory and Research in Human Sexuality (3 cr.) A critical examination of sociological theory and research in the area of human sexuality. Historical and contemporary work will be considered.

SOC–S 631 Intergroup Relations (3 cr.) Topics include nature of prejudice, theories of prejudice, psychology of attitudes related to intergroup relations, critique and evaluation of current research of majority-minority relations, and formulation of research designs.

SOC–S 633 Social Interaction: Interpersonal Relations (3 cr.) Focuses on social interaction processes. Topics include interpersonal perception, verbal and nonverbal communication, the presentation of self, ecological determinants of interaction, the structure of interactions, social exchange, and stable interaction systems (relationships).

SOC–S 640 Advanced Topics in Sociological Theory (3 cr.) Historical development of sociological theory in Europe and the United States during the nineteenth and twentieth centuries, with emphasis on contrasting schools of theoretical thought.

SOC–S 647 Social Change (3 cr.) Contemporary theories of social change, analysis of modernization processes such as industrialization and urbanization, examination of current social movements, and models of future societies.

SOC–S 649 Theory Construction (3 cr.) Analysis of the types and structures of formal theory in sociology. Examination of the specific practices of theory construction.

SOC–S 650 Statistical Techniques in Sociology II (3 cr.) P: S554 or consent of instructor. Statistical analysis of models with noncontinuous dependent variables. May include techniques such as logit and probit analysis, log-linear models, censoring, and sample selection models.

SOC–S 651 Topics in Quantitative Sociology (3 cr.) P: S554, S650. Statistical analysis in social research; selected topics.

SOC–S 652 Topics in Qualitative Methods (3 cr.) Selected topics in qualitative data collection and analysis. Various topics that could be covered in a given semester include audiovisual recording in natural settings, comparative/cross-cultural methods, content analysis, ethnographic methods, historical sociology, and intensive interviews and case studies.

SOC–S 655 Experimental Methods in Sociology (3 cr.) Analysis of laboratory experiments; problems in experimentation; practice in conducting experiments.

SOC–S 656 Mathematical Applications in Sociology (3 cr.) P: S650. Mathematical description of social systems and processes; computer simulation; mathematics and sociological theory.

SOC–S 657 Selected Problems in Cross-Cultural Sociological Research (3 cr.) Problems of research in different cultural settings. Adaptation of standard sociological techniques, development of research designs, administration of research in situations of limited resources.

SOC–S 658 Community Power, Politics, and Decision Making (3 cr.) This course is eligible for a deferred grade. Cross-disciplinary perspectives on community influence structures, governmental forms, and the local and national processes generating community public policies. Research strategies appropriate to the study of these issues.

SOC–S 659 Qualitative Methods in Sociology (3 cr.) P: S558 or permission of instructor. Methods of obtaining, evaluating, and analyzing qualitative data in social research. Methods covered include field research procedures, participant observation, interviewing, and audio-video recording of social behavior in natural settings.

SOC–S 660 Advanced Topics (2–6 cr.) Topics announced when course is to be offered.

SOC–S 700 Topical Seminar (3–12 cr.)

SOC–S 706 Sociological Research in Higher Education (3 cr.)

SOC–S 710 Social Organization I (3–6 cr.)

SOC–S 711 Social Organization II (1–6 cr.)

SOC–S 720 Deviance and Control I (3–6 cr.)

SOC–S 721 Deviance and Control II (3–6 cr.)

SOC–S 730 Social Psychology I (3–6 cr.)

SOC–S 731 Social Psychology II (3–6 cr.)

SOC–S 740 Social Theory I (3–6 cr.)

SOC–S 741 Sociological Theory II (3–6 cr.)

SOC–S 750 Sociological Methods I (3–6 cr.)

SOC–S 751 Sociological Methods II (3–6 cr.)

SOC–S 864 Readings in Sociology (arr. cr.) Individual assignments.

SOC–S 866 Research in Sociology (arr. cr.)

SOC–S 869 Ph.D. Thesis (arr. cr.) This course is eligible for a deferred grade.

SOC–G 591 Methods of Population Analysis and Their Applications (3 cr.) A course in statistics. Techniques of measuring and analyzing population size and trends, fertility and mortality patterns, migration flows. Population estimates and projections. Major models of formal demography.

SOC–G 901 Advanced Graduate Research (6 cr.) This course is eligible for a deferred grade.

Spanish and Portuguese

College of Arts and Sciences

Departmental URL: www.indiana.edu/~spanport/

Departmental E-mail: gradhisp@indiana.edu

Curriculum

Degrees Offered

Master of Arts and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

1. Undergraduate major in Spanish or Portuguese or its equivalent. (Students lacking a complete major must remove deficiencies);
2. Graduate Record Examination (GRE) General Test;
3. Test of English as a Foreign Language (TOEFL)—international students only;
4. Three letters of recommendation;
5. Statement of purpose;
6. Official Transcripts;
7. Writing sample (Ph.D. Hispanic literature applicants only)

Master of Arts Degree

Admission to the M.A. program does not imply that once the degree is received the student may automatically begin work for the Ph.D.; the department will decide in each case.

The following requirements apply to all M.A. degrees.

Final Examination

Six-hour written examination, based on a reading list, and a one-hour oral examination. Both must be passed at least two weeks before the end of the semester in which the degree is to be granted. Students must demonstrate a good command of oral and written Spanish

or Portuguese language on the examinations. There are separate reading lists for students of Literatures in Spanish, Portuguese, and Hispanic linguistics. The M.A. examination is held the first Saturday in April and the first Saturday in November only for all programs.

Other Provisions

Students must serve one year (or longer at the discretion of the department) as associate instructors in the department. Students who have taught elsewhere may petition the faculty to have that experience fulfill this requirement.

Master of Arts Degree in Spanish

Concentration in Literatures in Spanish

Course Requirements

A minimum of 30 credit hours of departmental courses numbered 500 or higher, four of which must be 500-level Spanish literature courses.

Language Requirement

Reading knowledge of an approved second foreign language. Proficiency is satisfied as outlined in the "Doctor of Philosophy, Language Requirement" section.

Concentration in Hispanic Linguistics

Course Requirements

A total of 30 credit hours of which at least 21 must be in Hispanic linguistics. S425 or the equivalent is required and counts toward the required 21 credit hours. Up to 9 credit hours may be taken in other departments related to the student's field of study.

Language Requirement

Reading knowledge of an approved second modern language. Proficiency is satisfied as outlined in the "Doctor of Philosophy, Language Requirement" section.

Master of Arts Degree in Portuguese

Course Requirements

A minimum of 30 credit hours in graduate-level courses, at least 20 credit hours of which must be in departmental courses in Portuguese. A thesis (1-6 credits) is optional. With the approval of their advisor, students may take up to 10 credit hours of course work in a minor field.

Language Requirement

Reading knowledge of an approved second foreign language. Proficiency is satisfied as outlined in the "Doctor of Philosophy, Language Requirement" section.

Doctor of Philosophy Degree

Two degrees are offered. The following requirements apply to both. Students are eligible to apply to the Ph.D. programs upon successful completion of an M.A. degree in the intended area of study.

Language/Research-Skill Requirement

Proficiency in multiple languages is an important tool for research. Therefore, students should consult with their advisors and the Director of Graduate Studies before determining which languages they will choose for proficiency. For all plans, students must have reading proficiency in two additional languages (or one in-depth proficiency) besides English and the language of the target program. These may be satisfied in the following ways:

1. Proficiency for students taught inside the Department of Spanish and Portuguese:

    a. Spanish: completing with a grade of B (3.0) or better, S105, or the equivalent, and one course at the 500 level or higher (excluding S517);

    b. Portuguese: completing, with a grade of B (3.0) or better, P135, or the equivalent, and one course at the 500 level or higher;

    c. Catalan: completing, with a grade of B (3.0) or better, two courses at the 400 level or higher;

    d. In-depth language proficiency: The student must first establish proficiency in the language by one of the methods listed above (a-c). Then the student must pass, with a grade of B or better, another course at the 500 level or higher.

2. Proficiency for students not taught in the Department of Spanish and Portuguese: The Department of Spanish and Portuguese accepts language proficiency by any of the following methods, provided that these also fulfill the target language department's proficiency requirements:

    a. For Spanish, passing a language proficiency examination;

    b. For Spanish, passing an S300-level, or higher, literature, linguistics or culture course with a grade of B (3.0) or better; For Portuguese, passing a course numbered P300-level or higher course with a grade of B (3.0) or better; For Catalan, passing a C400-level, or higher, course with a grade of B (3.0) or better;

    c. For Spanish or Portuguese, passing the second half of a 400-level reading course (492) with a grade of B (3.0) or better;

    d. In-depth language proficiency: The student must first establish proficiency in the language by one of the methods listed above (a-c). Then the student must pass, with a grade of B (3.0) or better, another course at the 500 level or higher. The course must be taught in the target language.

S803, Individual Readings, cannot be counted towards language proficiency. Ph.D. students in linguistics may replace reading proficiency in one foreign language with two 500-level courses in statistics or two courses, chosen in consultation with the Director of Hispanic linguistics, in computer science.

Neither English nor the language of the degree program may be presented as one of the foreign languages.

Qualifying Examination

See individual program outlines for qualifying exam requirements.

Final Examination

Oral, primarily a defense of the dissertation.

Other Provisions

Competence in speaking Spanish or Portuguese fluently and with correct diction is expected of every student; hence, foreign residence in a Spanish- or Portuguese-

speaking country prior to receiving the Ph.D. is highly desirable. Students must serve one year (longer at discretion of the department) as associate instructors in the department. Students who have taught elsewhere may petition the faculty to have that experience accepted as fulfilling this requirement.

Doctor of Philosophy Degree in Spanish

Concentration in Literatures in Spanish

Course Requirements

A total of 90 credit hours, including at least 18 credit hours (six courses in departmental Spanish literature courses beyond the M.A. (S504, S512, and S517 do not count as literature courses); one of these courses must be an S708 seminar. In addition, students must take S512 or its equivalent. Students must also satisfy course requirements for a graduate minor (at least 12 credit hours). Students must have 60 credit hours in course work before being eligible to take the qualifying examination. (A maximum of 30 credit hours may be transferred from the M.A.) The remaining credit hours can be taken as thesis hours. Ph.D. students in Literatures in Spanish may not take 400-level courses in Spanish.

Minor

Twelve credit hours or more in a related field. Some recommended fields: anthropology, Catalan, comparative literature, history, Latin American studies, philosophy, Luso-Brazilian, cultural studies, folklore and ethnomusicology, and West European studies. Ph.D. students in Spanish who wish to minor in Portuguese must take three graduate courses in literature beyond the foreign-language proficiency requirement.

Qualifying Examination

The qualifying examination for Literatures in Spanish will consist of three parts: (1) two three-hour written exams; (2) an exploratory paper; and (3) an oral examination. In addition, a written or oral examination may be required in the minor field, at the discretion of the minor department. The qualifying examination may be repeated only once. For details about examinations, contact the Director of Graduate Studies.

Concentration in Hispanic Linguistics

Course Requirements

The degree consists of 90 credit hours. Course work consists of 63 credit hours (up to 30 credit hours in Hispanic linguistics may be applied from the M.A.): (1) 12 credit hours in Hispanic linguistics (9 at the 600 level and 3 at the 700 level); (2) 12 credit hours in the student's primary research area; (3) 12 credit hours in another primary area of interest; (4) 9 credit hours in a secondary area of interest; and (5) 30 elective credit hours. (These distribution requirements fulfill the Ph.D. minor of at least 12 credit hours in another department.) Thesis work consists of 15 credit hours.

Qualifying Examination

Students will take examinations in each of the three areas of concentration. The examining committee will determine whether the format is to be sit-down or take-home. If the exams are sit-down, they will last nine hours, six hours, and three hours, respectively. The nine-hour exam will cover the student's principal area as reflected by the dissertation topic. The six-hour exam will cover the second concentration. The three-hour exam will cover the third concentration, consisting of 9 credit hours. If the format is to be take-home, students will have one week to write each portion of the exam, and these exams will be taken in series. In either case, the sequence of exams must be completed within 60 days.

Doctor of Philosophy Degree in Portuguese

Course Requirements

A total of 90 credit hours (a maximum of 30 credit hours may be transferred from the M.A.). Work in the major, secondary, and minor fields must total 75 credit hours in courses and seminars in addition to completion of a doctoral dissertation. Students' programs are individualized and depend on the approval of the graduate faculty in Portuguese.

Minor

Twelve credit hours or more in a related field.

Qualifying Examination

The qualifying examination is both written and oral. Students concentrating in Portuguese will also be examined in Spanish or another approved secondary area of interest. The written examination is 12 hours. A written or oral examination may also be required in the minor field, at the discretion of the minor department. The qualifying examination may be repeated only once. For details about examinations, contact the director of graduate studies.

Outside Minor Requirements

Ph.D. Minor in Literatures in Spanish

Doctoral students from other departments may complete a minor in Spanish by successfully completing no fewer than four Spanish literature courses (12 credit hours). All courses must be at least at the 500 level and approved by the Director of Graduate Studies. **S803 Individual Readings** cannot be counted toward the minor.

Ph.D. Minor in Hispanic Linguistics

Doctoral students may complete a minor in Hispanic linguistics by successfully completing no fewer than four courses in Hispanic linguistics (12 credit hours). All courses must be at least at the 500 level and approved by the director of Hispanic linguistics. Transfer credits for courses taken elsewhere are not accepted. **S803 Individual Readings** cannot be counted toward the minor.

Ph.D. Minor in Portuguese

Doctoral students from other departments may complete a minor in Portuguese by successfully completing no fewer than four Portuguese courses (12 credit hours) listed in the University Graduate School Bulletin as carrying credit toward the Ph.D. **S803 Individual Readings** cannot be counted toward the minor.

Faculty

Chairperson
Professor Catherine Larson*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Luis Beltrán* (Emeritus), Maryellen Wolfe Bieder*, J. Clancy Clements*, Luis Dávila*, Olga T. Impey*, Catherine Larson*, Consuelo López-Morillas* (Emerita), Heitor Martins* (Emeritus), Kathleen Myers*, Darlene J. Sadlier*, Gustavo Sainz*, Josep Miquel Sobrer* (Emeritus), Frances Wyers* (Emerita)

Associate Professors

Mary L. Clayton* (Emerita), Deborah Cohn*, Manuel Antonio Díaz-Campos*, Melissa Dinverno*, Patrick E. Dove*, John Dyson* (Emeritus), César Félix-Brasdefer*, Kimberly Geeslin*, Alejandro Mejías-López*, Reyes Vila-Belda*, Steven Wagschal*

Assistant Professors

Carl Good*, Edgar Illas, Luciana Namorato, Miguel Rodríguez-Mondoñedo*, Estela Vieira, Erik Willis*

Director of Graduate Studies

Associate Professor Steven Wagschal*, Ballantine Hall 805, (812) 855-9194

Courses

Spanish

HISP–S 407 Survey of Spanish Literature I (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 408 Survey of Spanish Literature II (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 407 Survey of Spanish Literature II (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 412 Spanish America: The Cultural Context (3 cr.) P: S331 or equivalent.One course from S324, S328, S331, S333, S334.

HISP–S 413 Hispanic Culture in the United States (3 cr.) P: One course from S324, S328, S331, S333, S334.

HISP–S 417 Hispanic Poetry (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 418 Hispanic Drama (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 419 Modern Spanish Prose Fiction (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 420 Modern Spanish-American Prose Fiction (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 421 Advanced Grammar and Composition (2 cr.) For M.A.T. students only.

HISP–S 423 The Craft of Translation (3 cr.) P: S308 or S312, and S328 or S332.

HISP–S 425 Spanish Phonetics (3 cr.) P: S326 or equivalent.

HISP–S 428 Applied Spanish Linguistics (3 cr.)

HISP–S 435 Literatura Chicana y Puertorriqueña (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 450 Don Quixote (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 470 Women and Hispanic Literature (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 471 Spanish-American Literature (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 472 Spanish-American Literature II (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 473 Hispanic Literature and Literary Theory (3 cr.)

HISP–S 474 Hispanic Literature and Society (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 479 Mexican Literature (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 480 Mexican Literature (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 481 Topics in Hispanic American National/ Regional Literature (3 cr.) P: One course from S328, S331, S332, S333; one course from S275, S324, S326; and one course from S308, S312, S315, S317.

HISP–S 495 Hispanic Colloquium (1–3 cr.)

Teaching Spanish

HISP–S 505 Summer Language Workshop (2 cr.) Two-week intensive summer language and culture workshop for school teachers in San Luis Potosí, Mexico. All-Spanish; live with families. Combination of individualized language development, culture seminars, and individual projects.

HISP–S 510 Foreign Study in Spanish (2–8 cr.) Formal study of Hispanic language, literature, and culture in a

foreign country, with credit applying to the M.A.T. degree only. Does not count toward the 20 credit hours required in Spanish. Program must be approved by the department before courses are taken.

Spanish American Literature

HISP–S 504 Bibliography and Methods of Research (1–3 cr.)

HISP–S 512 Theory and Criticism (1–3 cr.) Focuses on major issues in literary theory, with attention given to critical trends in the Hispanic world.

HISP–S 518 Spanish Medieval Literature (3 cr.) Survey of literature from its beginnings to 1500. The main focus will be on major works studied within their historical and cultural contexts, within the literary genres to which they belonged, and within the traditions they renewed. All texts will be read in the original language.

HISP–S 528 Spanish Literature of the Sixteenth and Seventeenth Centuries (3 cr.) Survey of the prose, poetry, and theatre of the Spanish Golden Age. Authors may include Garcilaso, the mystic writers, Cervantes, Lope de Vega, Calderón, Zayas, Góngora, and Quevedo. Examines the dynamics of power, gender, and genre in representative texts.

HISP–S 538 Spanish Literature of the Eighteenth and Nineteenth Centuries (3 cr.) Focuses on the major works of the period of all genres (poetry, fiction, drama, essay) and covers the main intellectual trends: Enlightenment, Romanticism, Realism, and Naturalism. Traces issues such as emerging genres, class and power, gender and sexuality, and nation formation.

HISP–S 548 Spanish Literature of the Twentieth and Twenty-First Centuries (3 cr.) Survey of literature from the beginning of the twentieth century to the present. May include a variety of genres (e.g., narrative, poetry, drama, and film) and examine a range of issues (e.g., power, gender, nation, and exile).

HISP–S 558 Colonial Spanish American Literature (3 cr.) Surveys the central literary-historical movements and texts in Spanish America from 1492 to 1820. Includes a study of the chronicles, mid-colonial poetic and autobiographical forms, and pre-independence literature.

HISP–S 568 Nineteenth- and Early Twentieth-Century Spanish American Literature (3 cr.) Survey of the nineteenth- and early twentieth-century drama, essay, prose, and poetry. Emphasizes the introduction of Romanticism, literature gauchesca, positivism, modernismo, Realism, and Naturalism. Primary readings may include, among others, Bolívar, Bello, Heredia, Avellaneda, Sarmiento, Echeverría, Isaacs, Hernández, Palma, Darío, Quiroga, and F. Sánchez.

HISP–S 578 Twentieth- and Twenty-First-Century Spanish American Literature (3 cr.) Survey of Spanish American poetry, prose, and theatre of the twentieth and twenty-first centuries. Examines movements such as modernismo, la vanguardia, and the “new narrative.”

HISP–S 588 U.S. Latino Literature (3 cr.) Survey of Chicano, Continental Puerto Rican, Cuban-American, and other U.S. Latino literature written in Spanish, English, or both. Emphasis on the Hispanic literary, linguistic, and cultural dialectic with English-speaking society. The course will be conducted in Spanish.

HISP–S 618 Topics in Spanish Medieval Literature (3 cr.) Investigation of fundamental components of Spanish medieval literature and culture in conjunction with current scholarship and critical approaches. Topics may include lyric poetry, mester de juglaria, mester de clerecia, romancero, didactic and historical prose, fiction, drama, paleography, translation, and cultural issues of medieval Spain and Al-Andalus.

HISP–S 628 Topics in Early Modern Spanish Literature (3 cr.) Topics may explore questions of genre (the picaresque, the comedia), major works (Don Quijote), authors (Góngora, María de Zayas), themes (madness, seduction), or theoretical approaches (the investigation of power, historiographical accounts).

HISP–S 638 Topics in Early Modern Spanish Literature (3 cr.) Topics may explore questions of genre (the picaresque, the comedia), major works (Don Quijote), authors (Góngora, María de Zayas), themes (madness, seduction), or theoretical approaches (the investigation of power, historiographical accounts).

HISP–S 648 Topics in Contemporary Spanish Literature (3 cr.) The literature and culture of Spain from the twentieth century to the present. Topics may include the Spanish essay, Generation X, death and violence, writing memory, urban/rural landscapes and the ecocritical debate, and constructions of the body.

HISP–S 659 Topics in Colonial Spanish American Literature (3 cr.) Topics may include the chronicles and early modern theories of representation, indigenous writing and identities, el barroco de indias in poetic and prose genres, life writings (vidas) and gender, and paleographic study of archival texts.

HISP–S 668 Topics in Nineteenth- and Early Twentieth-Century Spanish American Literature (3 cr.) Topics may include literature of independence, gauchesca poetry and tradition, representations of nature, Romanticism and late Romanticism, modernity and modernismo, nationalism, the novella de la tierna, race ethnicity, and gender.

HISP–S 678 Topics in Contemporary Spanish American Literature (3 cr.) The literature and culture of Spanish America from the beginning of the twentieth century to the present. Topics may include the Boom, magic realism, identity formation, modernity, revolution and politics, gender and sexualities, race, and ethnicity.

HISP–S 688 Topics in U.S. Latino and/or Caribbean Literature (3 cr.) Study of problems, research trends, and topics in U.S. Latino and/or Caribbean poetry, prose, drama, and essay. Topics may include border studies, identity formation, post-colonial theory, issues of exile and diaspora. The course will be conducted in Spanish.

HISP–S 695 Graduate Colloquium (1–3 cr.) Selected topics on Spanish or Spanish American literature.

HISP–S 708 Seminar in Hispanic Studies (3 cr.)

HISP–S 803 Seminar in Hispanic Studies Individual Readings in Spanish or Spanish American Literature and Language (arr. cr.) P: M.A. degree. Students must make arrangements in advance with the professor who

will supervise their readings. Contact the departmental graduate office for further information.

Hispanic Linguistics

HISP–G 611 Romance Linguistics (3 cr.)

HISP–S 501 Spanish Historical Grammar (3 cr.) P: Fulfillment of Latin requirement. History of the system of sounds and forms of words and their meanings from Latin origins to contemporary standard Spanish.

HISP–S 503 Bibliography and Research Methods in Hispanic Linguistics (3 cr.) History of Hispanic linguistics scholarship, research skills such as bibliography compilation, and abstract/paper writing on and critical reading of topics in Hispanic linguistics.

HISP–S 508 Introduction to Hispanic Pragmatics (3 cr.) Examines the intentions of language users and how discourse is interpreted by hearers. After introducing fundamental concepts in pragmatics, the course analyzes how pragmatics relates to syntax and semantics. Topics include: speech acts, deixis, presupposition, implicature, politeness, and conversation analysis. Examples are taken from different varieties of Spanish.

HISP–S 509 Spanish Phonology (3 cr.) Introduction to the sound system of Spanish. Various theories are presented and analyzed. Some treatment of dialectal phenomena included.

HISP–S 511 Spanish Syntactic Analysis (3 cr.) Introduction to the analysis of syntactic data. Focus on developing theoretical apparatus required to account for a range of syntactic phenomena in Spanish.

HISP–S 513 Introduction to Hispanic Sociolinguistics (3 cr.) Examines the relationship between language and society in the Spanish-speaking world. Surveys a wide range of topics relevant to Spanish: language as communication, the sociology of language, and linguistic variation.

HISP–S 515 The Acquisition of Spanish as a Second Language (3 cr.) Surveys the empirical research conducted on Spanish and investigates how a nonnative linguistic system develops. Course includes four topics: morpheme acquisition studies, interlanguage development, input processing, and Universal Grammar.

HISP–S 517 Methods of Teaching College Spanish (3 cr.) Trains graduate students to teach the freshman and intermediate college courses in Spanish

HISP–S 601 Spanish Historical Grammar I (3 cr.) P: S501 or equivalent. History of the system of sounds and forms, of words and their meanings from Latin origins to contemporary standard Spanish.

HISP–S 603 History of the Spanish Language (3 cr.) P: Fulfillment of Latin requirement. The rise and development of Spanish in the Iberian peninsula and Latin America, seen in historical and cultural contexts. The history of sounds, forms, and words; major dialects; the evolution of prose style to the eighteenth century.

HISP–S 609 Spanish Phonology II (3 cr.) P: S509 or equivalent. Introduces recent developments in phonological theory and their application to Spanish, as well as non-derivational approaches. Focuses mainly on nonlinear analyses.

HISP–S 611 Advanced Spanish Syntax (3 cr.) P: S511 or equivalent. Advanced study of modern approaches to synchronic syntax as applied to contemporary Spanish. Focus on current theories and refinement of linguistic argumentation, as well as on critical analysis or research.

HISP–S 612 Topics in Linguistic Variation and Language in Context (3 cr.) Examines current topics in linguistic variation and language in context in-depth, with a particular focus on issues relating to the Spanish language. Topics include: sociolinguistic and phonological variation, networks and communities of practice, the quantitative paradigm, conversation analysis, linguistic politeness, speech act theory, discourse markers, and research methodology.

HISP–S 614 Topics in Acquisition of Spanish (3 cr.) P: S515 or equivalent. Provides closer examination of topics and research in first and/or second language acquisition, focusing specifically on the Spanish language. Topics include the acquisition of phonology, syntax, morphology, and semantics as well as input processing, psycholinguistics, and research design.

HISP–S 615 Hispanic Dialectology (3 cr.) Principles of linguistic geography and dialectology. History and description of dialects in the Iberian Peninsula and Spanish America.

HISP–S 712 Seminar: Themes in Spanish Linguistics (arr. cr.) Course may be repeated for credit when the topic varies.

HISP–S 716 Seminar: Themes in the Acquisition of Spanish as a Second Language (arr. cr.)

HISP–S 803 Individual Readings in Spanish or Spanish American Literature and Language (arr. cr.) P: M.A. degree.

Portuguese

HISP–P 412 The Cultural Context (3 cr.)

HISP–P 425 Structure of Portuguese Language (3 cr.)

HISP–P 500 Literatures of the Portuguese-Speaking World I (3 cr.) Survey of the literatures from Brazil, Portugal, and Lusophone Africa. Lectures and discussions of selected authors of the major literary periods.

HISP–P 501 Literatures of the Portuguese-Speaking World II (3 cr.) Survey of the literatures from Brazil, Portugal, and Lusophone Africa. Lectures and discussions of selected authors of the major literary periods.

HISP–P 505 Literature and Film in Portuguese (3 cr.) Survey of literary works and film adaptations from the Lusophone world.

HISP–P 510 Brazilian Cinema (3 cr.) A survey of Brazilian cinema from the beginning of the twentieth century to present day. Taught in English.

HISP–P 515 Woman Writing in Portuguese (3 cr.) A survey of women's writings from different Portuguese-speaking nations.

HISP–P 520 Literatures of the Portuguese-Speaking World in Translation (3 cr.) Readings of Brazilian,

Portuguese, and Lusophone African writers from a comparative perspective. Specific topics may vary in any given semester. Taught in English. Cannot count toward graduate degrees with specialization in Portuguese.

HISP–P 567 Contemporary Portuguese Literature (3 cr.) Representative authors and works from 1915 to the present.

HISP–P 570 Poetry in Portuguese (3 cr.) A study of poetic genres in Portuguese; emphasis on major authors from Brazil, Portugal, and Lusophone Africa.

HISP–P 575 Theatre in Portuguese (3 cr.) A survey of theatre in the Portuguese language from the sixteenth century to the late twentieth century. Particular attention will be given to the social and historical context in which works were produced.

HISP–P 576 Prose in Portuguese (3 cr.) Survey of prose writers and works from the Middle Ages to the present.

HISP–P 581 Contemporary Brazilian Literature (3 cr.) Representative authors and works from 1922 to the present.

HISP–P 601 Portuguese Historical Grammar (3 cr.) History of the system of sounds and forms, of words and their meanings from Latin origins to contemporary standard Portuguese

HISP–P 605 Portuguese Linguistics (3 cr.) A structural description of modern Portuguese to include phonetics and phonology and some of the main features of the morphological and syntactic systems.

HISP–P 655 Camões (3 cr.)

HISP–P 676 Machado de Assis (3 cr.)

HISP–P 695 Luso-Brazilian Colloquium (1–3 cr.) Topics and credits vary.

HISP–P 701 Seminar: Portuguese Literature (arr. cr.) In-depth study of selected topics.

HISP–P 710 Seminar: African Literature in Portuguese (3 cr.) This course will introduce students to representative authors from Lusophone Africa. Discussions will focus on topics such as the relationship between oral culture and the written word, colonial and postcolonial attitudes toward race and social class, and gender issues. Primary readings include novels, poetry, and short fiction.

HISP–P 751 Seminar: Brazilian Literature (arr. cr.) In-depth study of selected topics.

HISP–P 803 Individual Reading in Portuguese or Brazilian Literature (3 cr.) P: M.A. degree. Students must make arrangements in advance with the instructor who will supervise their readings. Please contact the department graduate office for further information.

Catalan

HISP–C 400 Catalan Language and Culture I (3 cr.) R:Knowledge of another Romance language. Introduction to the study of Catalan language and of the particular situation of Catalonia as a culture within present-day Spain. May be used in elective area of the Spanish major. Does not count toward the major in Portuguese.

HISP–C 410 Catalan Language and Culture II (3 cr.)

HISP–C 450 Catalan Literature (3 cr.) P: C400 or consent of instructor. Survey of Catalan literature from the Middle Ages to the present. Significant works in all genres will be studied within their historical and cultural context. Issues of nation formation, hegemony, biculturalism, and marginalization will be paid special attention.

HISP–C 550 Catalan Literature (3 cr.) Survey of Catalan literature from the Middle Ages to the present. Significant works in all genres will be studied within their historical and cultural context. Issues of nation formation, hegemony, biculturalism, and marginalization will be paid special attention.

HISP–C 613 Catalan Linguistics (3 cr.) P: C400. Study of contemporary Catalan language and its history. Deals with phonology, grammar, and lexicology.

HISP–C 618 Topics in Catalan Literature (3 cr.) P: Topics include medieval narrative, Valencian literature, the Renaixenca, Modernisme and Noucentisme, the avant-garde, poetry and resistance, utopias and dystopias, specific writers (Rodoreda, Capmany, Roig, Riera, Barbal), theatre and the Barcelona stage. Topics to be explored in a multicultural context and in view of current critical issues and theory.

HISP–C 803 Individual Reading in Catalan Literature or Language (1–3 cr.) P: Students must make arrangements in advance with the professor who will supervise their readings. Please contact the department graduate office for further information.

Thesis Hours

HISP–P 802 M.A. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

HISP–P 805 Ph.D. Thesis (1–12 cr.) **These courses are eligible for a deferred grade.

HISP–S 802 M.A. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

HISP–S 805 Ph.D. Thesis (1–12 cr.) **These courses are eligible for a deferred grade.

HISP–G 901 Advanced Research (6 cr.) Auth.

Reading Knowledge

HISP–P 491 Elementary Portuguese for Graduate Students (3 cr.)

HISP–P 492 Readings in Portuguese for Graduate Students (3 cr.)

HISP–S 491 Elementary Spanish for Graduate Students (3 cr.)

HISP–S 492 Readings in Spanish for Graduate Students (3 cr.)

Speech and Hearing Sciences

College of Arts and Sciences

Departmental E-mail: sphsdept@indiana.edu

Departmental URL: www.indiana.edu/~sphs/

Curriculum

Introduction

The graduate curriculum in Speech and Hearing Sciences combines training for students wishing to pursue clinical careers in speech-language pathology or audiology, as well as graduate studies in speech, language, and hearing sciences, speech-language pathology, and audiology for research or academic careers. The department is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Degrees Offered

Master of Arts in Speech and Hearing Science, Doctor of Philosophy in Speech and Hearing Sciences, and Ph.D. minor in Speech and Hearing Sciences. (The College of Arts and Sciences offers the Doctor of Audiology degree.)

Special Departmental Requirements

Adequate Progress

Individual student progress will be evaluated annually by program faculty. Students who are judged to be making inadequate progress on the basis of poor grades, incomplete coursework, or insufficient research accomplishments may be placed on academic probation. Students on academic probation will be offered a timetable for remedial work and re-testing, and will have restricted access to coursework and clinical experiences. If deficiencies are not corrected according to the revised timetable, the student is likely to be dismissed from the program. (See also general University Graduate School requirements.)

Master of Arts in Speech and Hearing Sciences

Course Requirements

A minimum of 36 credit hours, with no more than 6 credit hours in S780.

Practicum

Students wishing to receive certification must enroll in clinical practicum (S561, S563, and school practicum) each semester, and must complete at least three semesters of practicum with grades of B (3.0) or higher. Students who wish to earn the M.A. degree but do not choose to complete practicum requirements and clinical certification may complete a non-clinical M.A. degree.

Examinations

Each student must pass a written comprehensive examination evaluated by a faculty committee.

Doctor of Philosophy Degree in Speech and Hearing Sciences

Course Requirements

At least 90 credit hours with grade of B (3.0) or above. This coursework must include S685, S683, two or three area courses (S686, S696, or S702), and courses required for an outside minor. In addition, students must complete 6 credit hours of graduate coursework in experimental design and statistics or demonstrate equivalent competency. No more than 12 credit hours of coursework in experiemental design or statistics may count towards the required total of 90 credit hours for the degree. Additional required coursework may be determined by the student's graduate advisory committee.

Examinations

After completing the required coursework, students must pass a qualifying exam consisting of written questions and oral defense of the answers. Exam questions are tailored for each student by their faculty advisory committee, which also evaluates student performance. Students who do not pass the qualifying exam will be placed on academic probation and given a second opportunity to take the exam. Students who do not pass after two attempts are likely to be dismissed from the program.

Research and Dissertation

Each student must complete three research projects: first-year, second-year, and dissertation research projects. These projects will be evaluated by the students' individual advisory and dissertation research committees.

Ph.D. Minor in Speech and Hearing Sciences

Students wishing to obtain a minor in speech and hearing sciences must have a faculty advisor from the department. Adjunct faculty must receive approval from SPHS faculty to serve as the advisor for the student's minor. The advisor will approve the student's program of course work in the minor and will serve on the student's advisory committee, research committee, or both. The student is required to complete at least 12 credit hours of graduate course work in the minor department with a grade of B or higher. A written qualifying examination is not required, but will be administered at the request of the major department.

Ph.D. Double Major in Speech and Hearing Sciences

Students who are admitted into the double major Ph.D. program must complete the requirements for Speech and Hearing Sciences and the other major department as specified in the University Graduate School Bulletin. The advisory committee must include at least two members from Speech and Hearing Sciences and two faculty members from the second major field. Qualifying examination format will be determined with input from both major fields of study. A minor concentration is optional, but if a minor is undertaken, there must be one additional advisory committee member to represent that discipline. At least 30 graduate credit hours must be completed in Speech and Hearing Sciences or cross-listed courses.

Faculty

Chairperson

Professor Karen Forrest*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Phil J. Connell*, Karen Michele Forrest*, Judith A. Gierut*, Larry E. Humes*, Laura Murray*

Emeritus Professors

Jean Anderson*, Moya L. Andrews*, Mary Elbert*, Aubrey Epstein*, Nicholas Hipskind*, Diane Kewley-Port*, Kennon Shank*, Charles Watson*

Emeritus Clinical Professor

E. Gene Ritter

Associate Professors

Raquel Teresa Anderson*, Lisa Gershkoff-Stowe*, Jennifer Lentz*, William Shofner, Robert Withnell*

Clinical Professor

Elizabeth McCrea

Clinical Associate Professors

Nathan Amos, Nancy Barlow, Amy Conwell, Ann Densmore, Rebecca Eberle, Laura Karcher

Associate Scientists

Gary Kidd*, Michele Morrisette

Assistant Professors

Julie D. Anderson, Tessa Bent, Theresa Burnett, Rachel Holt.

Clinical Assistant Professors

Annette Champion, Amy Cornwell, Lindsay Fletcher, Carolyn Garner, Lisa Goerner, Joseph Murray, Julia Rademacher, Angela Banks-Stewart

Senior Lecturer

G. Michael Jackson

Clinical Lecturers

Angela Banks-Steward, Wayne Mnich, Dana Kinney

Academic Advising

Master's Program: Speech-Language Pathology: Associate Professor Laura Murray*, Speech and Hearing Center C183, (812) 855-3585; Au.D. Program: Assistant Professor Jennifer J. Lentz*, Speech and Hearing Center C147, (812) 855-8945; Ph.D. Program: Professor Judith Gierut*, Speech and Hearing Center C175, (812) 855-9173.

Courses

General

SPHS–S 680 Independent Study (1–6 cr.) This course is eligible for a deferred grade.

SPHS–S 780 M.A. Thesis (1–6 cr.) This course is eligible for a deferred grade.

SPHS–S 880 Ph.D. Thesis (1–6 cr.) This course is eligible for a deferred grade.

American Sign Language

SPHS–A 500 ASL Level One for Graduate Students (3 cr.) Introductory sign language for graduate students with no previous experience. Builds a good basic vocabulary of signs, teaches finger spelling, introduces basic aspects of grammar and the proper use of facial expression in sign language conversation. Students are also exposed to deaf culture.

SPHS–A 550 ASL Level Two for Graduate Students (3 cr.) P: A500 Continues building receptive and expressive abilities. Puts emphasis on the use of signing space, facial grammar, body postures, fluent finger spelling, and continued vocabulary development. More complex grammatical structures are introduced. Deaf culture component included.

SPHS–A 600 ASL Level Three for Graduate Students (2 cr.) Emphasizes the development on conversational ability. Examines more complex grammatical structures, with emphasis on ability to use these structures in conversation. Readings, videos, and discussion cover characteristics of the deaf population and their cultural values.

SPHS–A 700 ASL Level Four for Graduate Students (2 cr.) P: A600 Continues to develop knowledge of American Sign Language and deaf culture. Students will experience the language outside the classroom through interaction with the deaf community.

Speech and Hearing Sciences

SPHS–S 461 Introduction to Supervised Clinical Practice (2 cr.)

SPHS–S 474 Introduction to Audiological Testing (3 cr.)

SPHS–S 477 Auditory Disorders (3 cr.)

SPHS–S 478 Rehabilitative Audiology (3 cr.)

SPHS–S 501 Neural Bases of Speech and Language (3 cr.) Neuroanatomy of central and peripheral brain structures mapped to vocal tract structures; sensory and motor physiology; theories of motor control; neural control of vocalization and upper airway during propositional and nonpropositional speech; localization of receptive and expressive language brain areas, neuropathology and pathophysiology of central and peripheral nervous system lesions

SPHS–S 502 Acoustic Phonetics (2 cr.) P: S302 or L541. Examines speech perception and the acoustics of speech production in normally developing or speech-language disordered populations. A brief overview of speech acoustics and speech perception in normal adults will be included. Laboratory experiences.

SPHS–S 505 Clinical Application of Linguistic Theory (4 cr.) Application of models of language structure and use of the clinical process of diagnosis, evaluation, and treatment of phonological, lexical, morphological, and syntactic impairments of language acquisition.

SPHS–S 506 Counseling (2 cr.) Provides information about the counseling purview of audiologists and speech pathologists. Topics such as theories of counseling, lifespan issues, emotional responses to communication disorders, family dynamics, support groups, and multicultural issues will be presented. Students will learn basic counseling techniques and the application of these techniques for specific disorders.

SPHS–S 508 Physiological Models for Perception and Production of Speech and Voice (3 cr.) Provides students with understanding of the physiological bases for production and perception of speech and voice in humans. Covers the dynamic functioning of structures of the organs of speech production and perception, and the relations of their parts. This knowledge will form the basis for subsequent understanding of disorders of speech production and perception.

SPHS–S 509 Speech and Language Diagnostics (2 cr.) Theoretical bases of speech-language assessment, including concepts of testing and measurement, formal and informal evaluation techniques, and normative and non-normative approaches. Required accompanying laboratory provides observation and experience with specific assessment procedures.

SPHS–S 510 Supervision in Speech Pathology and Audiology (2 cr.) P: Consent of instructor. Study of the supervisory process as it relates to speech pathology and audiology.

SPHS–S 511 Phonetics of American Speech (2 cr.) P: Scientific study of American pronunciation based on International Phonetic Alphabet. Exercises in transcription.

SPHS–S 512 Cognitive Factors Related to Communication Disorders (3 cr.) Examines the manner in which language influences and is influenced by cognitive processes including attention, categorization, information processing and retrieval, and short and long-term memory. In addition, the course will explore how social factors such as age, gender, ethnicity, and culture interact with language form and use.

SPHS–S 513 Speech Anatomy and Physiology (2 cr.) Anatomy and physiology of the speech mechanism; contemporary views of speech physiology; subsystems of the speech mechanism—respiratory, laryngeal, and supraglottal—integrated with a model of speech production. Laboratory experiences.

SPHS–S 515 Topical Seminar in Speech Pathology or Audiology (1–6 cr.) Topics of current interest; literature on fundamental behavior related to speech or hearing.

SPHS–S 517 Cognitive and Communicative Aspects of Aging (2 cr.) Review of cognitive and communicative changes associated with normal aging as well as with diseases and conditions that are prevalent in the aging population. Includes discussion of methodological issues in research on aging as well as principles for maximizing communication with the elderly population.

SPHS–S 518 Preschool Language Intervention: Working with Teachers and Parents (2 cr.) An overview of current clinical research on preschool classroom and home-based intervention. Reviews preschool language development and introduces students to developmentally appropriate classroom-based and home-based intervention procedures. Participants will review and discuss current research and its relationship to children's language intervention plans.

SPHS–S 519 Mathematical Foundation for Speech and Hearing Sciences (2–3 cr.) Provides mathematical background for core graduate courses in speech and hearing sciences. Covers analysis and generation of periodic and aperiodic acoustic signals and decision theory. Focuses on interactive, project-oriented modules.

SPHS–S 520 Phonological Treatment (3 cr.) P: S420. Survey of evidence-based practices in treatment of children with phonological disorders. Advanced approaches to clinical management using principles of single-subject design to improve efficiency.

SPHS–S 521 Phonological Acquisitions and Disorders in Children (3 cr.) Survey of acquisition and development of sound systems, with focus on perception and production. Relationship between normal sound development and phonological disorders. Procedures for assessing and treating phonological disorders.

SPHS–S 522 Digital Signal Processing (3 cr.) P: One semester of calculus, one course in computer programming. Introduction to digital signal processing for students with a limited background in mathematics. Examines several standard applications in speech processing including LPC. Covers complex numbers, z-transforms, and filter design. Lab experiences with DSP software included.

SPHS–S 524 Survey of Children's Language Development (2 cr.) Theories and research relating to normal development of phonology, syntax, semantics, and pragmatics in children from birth through age four. Investigation of cognition and various environmental factors as contributors to language development. Emphasizes learning of elementary skills in language sample analysis.

SPHS–S 525 Childhood Dysarthria and Apraxia of Speech (3 cr.) The aim of this course is to introduce students to the basic correlates of children's motor speech disorders including issues of underlying pathology, physiological development, assessment procedures, and treatment alternatives.

SPHS–S 531 Traumatic Brain Injury (3 cr.) Disorders of perception, cognition, communication, and behavior associated with traumatic brain injury in children and adults are described. Discussion includes assessment and treatment procedures and issues associated with acute and chronic stages of recovery as well as a variety of clinical settings, including schools, hospitals, and community reintegration facilities.

SPHS–S 532 Early Communicative Development: Intervention and Theory (3 cr.) Presents knowledge of normal developmental theory and current research trends, and applies that information to the practice of speech-language pathology. Emphasis is on the cognitive bases of language acquisition, the role of social interaction in early communication development, and the culture and context in which individual children function.

SPHS–S 534 Language Development in School-Age Children (3 cr.) P: S333. Survey of theoretical perspectives and research findings related to language development in children aged five through twelve. Particular attention to relationships between oral language skills, reading, and writing. Consideration of language and context, including differences between language demands of home and school.

SPHS–S 535 Academically Based Language Intervention with School-Age Children (3 cr.) P: S534. R: At least one semester of S561. Explores issues involved in an academically based language intervention program with a focus on the child's need to use language to learn and to develop literacy. Setting goals for intervention and developing intervention plans will be discussed in the context of a collaborative model using a curriculum-based approach.

SPHS–S 536 Language Diversity and Clinical Practice (3 cr.) Examines the effects on current clinical practice in

speech-language pathology of the linked issues of racial, cultural, and linguistic diversity. Both assessment and intervention issues will be considered.

SPHS–S 537 Diagnosis and Management of Adult Aphasia (3 cr.) P: S501. In-depth study of diagnosis and management of adult aphasia and related disorders. Recommended procedures for evaluation and treatment of aphasics, including practicum and experience.

SPHS–S 538 Language Development in Atypical Populations: Learning Disabilities, Autism, and Mental Retardation (3 cr.) P: S333 and S436 or consent of instructor. An introduction to three clinical populations likely to have difficulties with language learning. Aspects of perceptual, cognitive, and social growth as they influence language acquisition; patterns of language development and use; issues related to intervention.

SPHS–S 539 Second-Language Acquisition and Bilingualism in Children (3 cr.) Focuses on how children acquire two languages. Topics concerning variables that impact dual-language acquisition children and patterns of acquisition will be discussed. Issues and strategies for evaluating language skills in this population, and for providing clinical services are presented.

SPHS–S 540 Voice Disorders (3 cr.) P: S444 or consent of instructor. Normal and abnormal voice production; diagnosis and management of voice problems. Emphasis will be on clinical intervention strategies for a wide variety of organic and functional voice disorders.

SPHS–S 541 Management of Tracheostomy and Laryngectomy (3 cr.) Aerodigestive tract dynamics and disorders, including assessment and treatment. Rehabilitation options associated with tracheostomy, laryngectomy, and dysphagia.

SPHS–S 542 Care of the Professional Voice (3 cr.) Physiological, psychosocial, and occupational aspects of professional voice use. A multidisciplinary perspective on research and practice in the areas of otolaryngology, social psychology, vocal pedagogy, voice science, and communication disorders. Examines historical and current approaches to preventing, assessing, and treating voice breakdown in singers and other professional voice users.

SPHS–S 543 Childhood Dysphagia: Diagnosis and Treatment of Swallowing Disorders (2 cr.) Anatomy and physiology of child swallowing and respiration is reviewed. Evaluation and treatment of child dysphagia emphasizing instrumental and non-instrumental assessment procedures and the development of efficacious treatment plans. Experience in analysis of child videofluroscopic studies of swallowing.

SPHS–S 544 Adult Dysphagia: Diagnosis and Treatment of Swallowing Disorders (2 cr.) Anatomy and physiology of adult swallowing and respiration is reviewed. Evaluation and treatment of adult dysphagia emphasizing instrumental and non-instrumental assessment procedures and the development of efficacious treatment plans. Experience in analysis of adult videofluroscopic studies of swallowing.

SPHS–S 545 Adult Cognitive-Communication Disorders (3 cr.) Issues in communication and cognitive disorders resulting from right-hemisphere brain damage and dementia. Discussion will include the relation between the nature and locus of brain lesion and the type and severity of communication and cognitive disorders, and assessment and treatment issues.

SPHS–S 546 Medical Speech-Language Pathology (2 cr.) Roles and responsibilities of speech-language pathologists in the medical arena with clients ranging the lifespan will be reviewed and discussed. Topics to be investigated will include continuum of care, interdisciplinary approach, pharmacology, terminology, client advocacy and accreditations, among others. Class format will include lecture, didactic discussion, student project presentations and guest speakers.

SPHS–S 547 Language Disorders in Children (2 cr.) Theory and method in language assessment and intervention. Coverage of principles of language intervention based on psycholinguistic theory and research with language-disordered children, design and execution of language intervention experiences; current alternative approaches to language intervention.

SPHS–S 548 Voice and Fluency in Children (2 cr.) Survey of theory and research relevant to the maturation of vocal behavior and prosodic patterns (including rate and fluency) from infancy through adolescence. Identification of characteristics of typical and atypical vocal behavior in interpersonal interactions. Observation and analysis of characteristics and discussion of types of intervention.

SPHS–S 550 Stuttering (3 cr.) P: S444 Theories of the nature and causes of stuttering, with emphasis on learning theories and physiological processes; evaluation techniques for children and adults; approaches to clinical management; techniques of parent and family counseling.

SPHS–S 550 Motor Speech Disorders (3 cr.) P: S201, S501. Disorders of speech motor programming (dyspraxia) and speech production (dysarthria) resulting from damage to primary motor, sensory, or sensorimotor pathways in the central and/or peripheral nervous system are considered at auditory-perceptual, acoustic, and physiologic levels. Assessment and management of motor speech disorders.

SPHS–S 560 Craniofacial Anomalies (3 cr.) P: S201. Orofacial clefts and other genetically based craniofacial disorders are considered in relation to speech production and swallowing. Assessment protocols include auditory-perceptual evaluation, vocal tract imaging (nasendoscopy and fluoroscopy), and speech aerodynamics. Introduction to therapy procedures.

SPHS–S 561 Topical Issues in Clinical Practice (1-3–4 cr.) P: S201. Current topics related to clinical practice in speech/language pathology.

SPHS–S 562 Practicum in Supervision (1 cr.) P: S510, S561. Practicum in the supervision of clinical practice in speech-language pathology and audiology.

SPHS–S 563 Externship in Speech-Language-Hearing Services (1–3 cr.) P: S561 or S570. Intensive participation in the clinical activities of community agencies, hospitals, or other service providers. Available only to advanced students in clinical program.

SPHS–S 570 Clinical Practicum in Audiology I (1–3 cr.) P: S561 or S570. Supervised on-site clinical work in

diagnostic and rehabilitative clinical audiology. Intended for students in the first year of the Au.D. program.

SPHS–S 571 Auditory Anatomy and Physiology (3 cr.) Structure and function of the mammalian auditory system, including aspects of both cellular and systems physiology.

SPHS–S 572 Clinical Electrophysiology (2 cr.) Focuses on current applications of electrophysiologic testing, including auditory evoked potentials, otoacoustic emissions, and electronystagmography. Will address role of each of these test procedures in the diagnostic audiologic test battery.

SPHS–S 573 Laboratory in Amplification (1 cr.) Laboratory exercises in hearing aid selection, fitting and evaluation; earmold acoustics; hearing aid construction; and electroacoustic evaluation of instruments. To be taken concurrently with S576

SPHS–S 574 Clinical Grand Rounds in Audiology (2–3 cr.) P: Consent of instructor. Survey of the clinical aspects of audiology pertaining to pathologies encountered in clinical environments with emphasis on specific etiologies.

SPHS–S 575 Human Hearing and Communication (2 cr.) Development of the auditory system and landmarks of auditory behavior, types of hearing loss, intake and exit interviewing techniques, audiometric standards, pure tone audiometry, acoustics impedance measurements, screening for auditory disorders and speech audiometry, effect of age and aging on oral communication, counseling the hearing impaired, strategies in selecting hearing aids, recommending auditory training, speech reading, and manual communication.

SPHS–S 576 Amplification for the Hearing Impaired (3 cr.) Types and components of electroacoustic hearing aids, earmold acoustics, and procedures for the selection, evaluation, and fitting of hearing aids.

SPHS–S 577 Industrial Audiology (2 cr.) P: Consent of instructor. The role of audiology, emphasizing identification audiometry, damage-risk criteria, measurement and control of noise, conservation procedures, and medico-legal problems.

SPHS–S 578 Audiological Instrumentation and Calibration (2 cr.) P: Consent of instructor. Fundamentals of acoustics and acoustical measurements including waveform measurements, spectral analysis, and noise analysis. Calibration techniques and standards for clinical audiology are also reviewed.

SPHS–S 579 Children with Hearing Loss (3 cr.) P: Consent of instructor. Introduction to the assessment of communication skills in children with hearing loss. Topics covered include early identification of hearing loss, assessment of hearing in very young children, speech and language development in children with hearing loss, and management strategies for hearing-impaired children.

SPHS–S 580 Introduction to Research in Communication Disorders (3 cr.) Treatment decisions in speech/language pathology must be: 1) based on ethical principles, 2) made responsibly in line with the existing evidence in the literature, and 3) presented in a professional manner. Introduces students to the evaluation of literature that will help them make responsible decisions about assessments and treatments. Provides them with the tools to determine the importance and/or validity of procedures that are used.

SPHS–S 601 Experimental Phonetics II (3 cr.) P: Consent of instructor. Speech acoustics. Examination of theories of vocal-tract transmission through a historical perspective. Consideration of literature in acoustic phonetics, with emphasis on research that models speech acoustics relative to articulatory configuration. Laboratory experiences.

SPHS–S 670 Clinical Practicum in Audiology II (1–3 cr.) Supervised on-site clinical work in diagnostic and rehabilitative clinical audiology. Intended for students in the second year of the Au.D. program.

SPHS–S 671 Auditory Evoked Potentials (2 cr.) This course considers the theory and application of Auditory Evoked Potentials, emphasizing Electrocochleography and Brainstem Evoked Response Audiometry.

SPHS–S 672 Clinical Externship in Audiology I (1–3 cr.) Supervised off-site clinical work in diagnostic and rehabilitative clinical audiology. Intended for students in the second year of the Au.D. program.

SPHS–S 673 Clinical Externship in Audiology II (1–5 cr.) Supervised off-site clinical work in diagnostic and rehabilitative clinical audiology. Intended for students in the third year of the Au.D. program.

SPHS–S 674 Advanced Seminar in Audiology (1–3 cr.) Intended for Ph.D. students. Various topics in clinical and experimental aspects of audiology. Content varies each semester.

SPHS–S 675 Assessment of Middle Ear Function (2 cr.) Examination of the theory and practice of clinical assessment of middle ear function. Course will include standard measures of middle ear function, multi-frequency tympanometry, and power reflectance.

SPHS–S 676 Advanced Clinical Concepts in Amplification (3 cr.) This seminar presents advanced material on conventional amplification, assistive listening devices, and classroom amplification systems. Students will develop models for selection, fitting, evaluation, and management of devices for patients with hearing loss. This includes integrating research content into clinical activities leading to appropriate, defendable rationales for a comprehensive hearing program.

SPHS–S 677 Implantable Auditory Prostheses (3 cr.) This course examines various surgically implantable devices used to ameliorate the effects of hearing loss, with particular emphasis on cochlear implants, including considerations for implantation and expected outcomes.

SPHS–S 678 Introduction to Psychoacoustics (3 cr.) Perception of sound by normal and hearing-impaired listeners. Topics covered include masking, pitch, loudness, and other auditory phenomena.

SPHS–S 679 Otoacoustic Emissions (3 cr.) Otoacoustic emissions provide a noninvasive measure of cochlear mechanical function. This course considers our current understanding of the origin of otoacoustic emissions and their clinical application.

SPHS–S 683 Otoacoustic Emissions (0–1 cr.) Research presentations by students, faculty in the Department of Speech and Hearing Sciences, and guest speakers. Normally taken each semester by students in speech and hearing sciences without credit, but may be taken once for 1 credit hour.

SPHS–S 685 Research in Speech, Language, and Hearing Sciences (3 cr.) Selected topics in research design, analysis, and reporting (articles and talks); ethics; and preparation of grant proposals, as appropriate to speech, language and hearing sciences, and disorders.

SPHS–S 686 Physiological Research in Speech, Language, and Hearing Sciences (3 cr.) Course topics vary according to student interests, including: neuroscience research in speech, language, cognition, and hearing; imaging; videostroboscopy; and motor control. Lab components to include instrumentation for EMG, biomechanics, and evoked potentials.

SPHS–S 696 Language Research in Speech, Language, and Hearing Sciences (3 cr.) Topics vary according to student interests, including advances in linguistic theory, language and phonological acquisition theory, neurolinguistics, language intervention, etiological research, cognition and language (including memory and attention), and reading and language. Lab components include computer software for both linguistic analyses and experimental presentation.

SPHS–S 702 Acoustic Research in Speech, Language and Hearing Sciences (3 cr.) Course topics vary according to student interests including speech production and perception in hearing impaired populations, language development, adult neurogenic speech and language disorders, voice analysis, and speech perception. Lab components to include digital recording, acoustic analysis and speech synthesis.

SPHS–S 771 Diagnostics and Pathologies (3 cr.) This course examines diagnostic audiology and auditory disorders within the scope of practice of clinical audiology. Attention will be given to theory, administration, and application of various clinical tests and measures used in assessment and treatment of children and adults.

SPHS–S 772 Amplification and Rehabilitation (3 cr.) This course examines an array of topics within the scope of practice of clinical audiology, with particular emphasis on matters germane to amplification and rehabilitation. Attention will be given to theory, administration, and application of various clinical tests and measures used for both assessment and treatment.

SPHS–S 773 Pediatrics and Special Populations (2 cr.) This course examines an array of topics within the scope of practice of clinical audiology, with particular emphasis on matters germane to pediatrics and special test populations. Amplification, business issues, and ethical considerations may also be discussed. Attention will be given to theory, administration, and application of various clinical tests and measures used for both assessment and treatment.

SPHS–S 774 Recent Advances in Audiology (2 cr.) This course examines an array of topics within the scope of practice of clinical audiology, with particular emphasis on examining the most recent literature from refereed journals. Attention will be given to theory, administration, and application of various clinical tests and measures used for both assessment and treatment.

SPHS–S 775 Vestibular Diagnosis and Rehabilitation (3 cr.) Vestibular system anatomy & physiology examined. Clinical tests and measures used to assess balance function are covered, including electronystagmography (ENG), videonystagmography (VNG), rotational chair, & dynamic posturography. Emphasis on clinical assessment, treatment & rehabilitation.

SPHS–S 777 Speech Communication, Aging, and Hearing Impairment (2 cr.) No prerequisites; this course focuses on whether hearing aids can help the elderly with impaired hearing understand speech, and if so, under what conditions and with what limitations.

SPHS–S 778 Educational Audiology (2 cr.) Combined lecture, classroom discussion, guest presentations, and case studies examining an array of topics within the scope of educational audiology. Particular emphasis on early intervention, educational law, and auditory access to language for cognitive development.

SPHS–S 779 Business Practices (2 cr.) This course aims to provide students with the tools necessary to create a framework for practicing audiology in a business setting.

SPHS–S 780 M.A. Thesis (arr. cr.)

SPHS–S 880 Ph.D. Thesis (arr. cr.)

Statistics

College of Arts and Science

Departmental E-mail: deptstat@indiana.edu

Departmental URL: http://www.stat.indiana.edu/

Curriculum

Degrees Offered

- Master of Science in Applied Statistics
- Master of Science in Statistical Science
- Doctor of Philosophy in Statistical Science

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Statistics is an increasingly interdisciplinary field. Recognizing that fact, the IU Department of Statistics welcomes students from a variety of quantitative backgrounds, not just statistics and mathematics.

To be admitted to the Master of Science in Applied Statistics program a student must be pursuing an M.S. or a Ph.D. in another program at IU.

Students entering our Master of Science or Ph.D. in Statistical Science programs should have a bachelor's or master's degree from an accredited university. Academic preparation should include at least two undergraduate courses in statistics, some background in mathematics that includes courses in multivariate calculus and linear algebra, and some familiarity with computer programming.

Applicants will be evaluated using a combination of academic transcripts, grade-point averages, GRE scores, TOEFL scores (for international applicants), letters of recommendation, and personal statements. Selection criteria include breadth and depth of preparation, quality of academic performance, and motivation.

Master of Science in Applied Statistics

The M.S. in Applied Statistics is intended for the student pursuing a Ph.D. or an M.S. in another field who wishes to enhance his or her statistical knowledge and credentials by obtaining a graduate degree in Statistics, in addition to a graduate degree in his or her primary field of study.

Course Requirements

A total of 31 credit hours including STAT S520, S631, S632, and S690, plus two courses from MATH M463, STAT S620, S625, S626, S637, S640, and S670. The remaining

12 credit hours must be taken in an area relevant to the field of Statistics, and must be approved by the Director of Graduate Studies.

Research Paper

Recommended, but not required.

Master of Science in Statistical Science

The M.S. program trains students to become applied statisticians who collaborate with researchers in various disciplines to design experiments and analyze data.

Course Requirements

A total of 31 credit hours including MATH M463, STAT S620, S631, S632, and S690; two courses from STAT S625, S626, S637, S640, and S670; three additional courses, two of which must be statistics courses at the 500-level or above.

Research Paper

Required.

Doctor of Philosophy in Statistical Science

The Ph.D. program trains students as research statisticians who develop new statistical methodology. This program is for graduate students who wish to obtain positions as research statisticians in academia, government, or industry.

Course Requirements

A total of 90 credit hours. Students are required to take the following courses: MATH M563, STAT S620, S631, S632, S690, S710, S721, S722, and INFO I500, plus two additional courses in statistical theory. Also required are 26 hours of Applied Statistics and Collaborative Research courses. Students can fulfill this requirement through a combination of coursework, research, and statistical consulting internships.

Minor

All students must complete a minor outside the department. Minor requirements are set by the awarding department and are described in the University Graduate School Bulletin.

Qualifying Examination

Each August, the department will administer two written qualifying exams, one in Statistical Theory and one in Data Analysis. Students may elect to take either exam at the end of year 2 or 3. Students who fail an exam may take it again the following year. Students who fail either exam more than once will be dismissed from the program. Students advance to candidacy after passing both exams and completing required coursework.

Advisory and Research Committees

For each student admitted to the PhD program, a doctoral advisory committee will be formed in the first year of training. After passing their qualifying exams, students must form a research (dissertation) committee. The student's committee (advisory or research) will consult with the student at least once per year to help the student determine his/her course of graduate study, develop a research program, approve the student's course selections, and review the student's progress in all areas (for example, completion of required courses, course grades, and research progress). The student's committee will determine whether or not the student is making adequate progress in all areas. Should the advisory (or research) committee determine that a student is not making adequate progress in any area, this may be grounds for eliminating a student's department funding, probation, or dismissal from the program.

Dissertation Proposal and Research

A dissertation is required. The dissertation represents original methodological research by the student. The research should be of sufficient quality to merit publication in peer-reviewed journals.

After passing the qualifying exams, students should begin the process of finding a dissertation advisor, forming a dissertation committee, and identifying a dissertation topic. The dissertation proposal is an oral exam intended to demonstrate to the statistics faculty that the student is prepared to begin research. The student will make an oral presentation that outlines the proposed research, including summaries of related work and descriptions of the techniques that will be used. The dissertation committee and other statistics faculty will then question the student.

Ph.D. Minor in Statistical Science

Doctoral students obtaining a Ph.D. in another discipline are welcome to choose Statistics as an outside minor. Five graduate courses in statistics are required, at least three of which must be at the 600-level or above taken from the Department of Statistics. The specific minor courses must be approved by the Director of Graduate Studies of the Department of Statistics.

Faculty

Chairperson

Professor Stanley Wasserman*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor and Chancellor's Professor

J. Scott Long*

Rudy Professors

Karen Kafadar*, Stanley Wasserman*

Professors

Steen Andersson* (Emeritus), Lanh Tran*(Emeritus), Michael Trosset*

Assistant Professors

Chunfeng Huang*, Guilherme Rocha*

Adjunct Professors

Franklin Acito* (Business), Katy Borner* (Library and Information Sciences), Richard Bradley* (Mathematics), Jerome Busemeyer* (Psychological and Brain Sciences), Yoosoon Chang* (Economics), Victor Goodman* (Emeritus, Mathematics), Andrew Hanson* (Computer Science), Elizabeth Housworth* (Mathematics), John Kruschke* (Psychological and Brain Sciences), Russell Lyons* (Mathematics), Robert Nosofsky* (Psychological and Brain Sciences), Joon Park* (Economics), Joanne Peng* (Education), Scott Robeson* (Geography), Richard Shiffrin* (Psychological and Brain Sciences), James Townsend* (Psychological and Brain Sciences), Pravin Trivedi* (Economics), Alessandro Vespignani* (Informatics)

Adjunct Associate Professors

Predrag Radivojac* (Informatics), Christopher Raphael* (Informatics)

Adjunct Assistant Professors

Juan Carlos Escanciano* (Economics), David Jacho-Chavez (Economics), Yoon-Jin Lee (Economics)

Director of Graduate Studies

Stanley Wasserman*

Courses

STAT–S 501 Statistical Methods I: Introduction to Statistics (3 cr.) P: One undergraduate course in statistics. This course takes a systematic approach to the exposition of the general linear model — focusing on correlation, simple linear and multiple regression. Students are introduced to the use of statistical analysis software. The first third of the course consists of a review of statistics, data analysis tools, significance tests, and confidence intervals. Students learn how to think creatively about the use of statistical methods in their own research.

STAT–S 503 Statistical Methods II: Generalized Linear Models and Categorical Data (3 cr.) P: STAT S501 or one undergraduate course in statistics. This course takes a systematic approach to the exposition of the general linear model — focusing on categorical data. Of primary concern will be models for which the response variable is categorical. Such models include probit, logit, ordered logit, and Poisson regression, among others. Students learn how to think creatively about the use of statistical methods in their own research.

STAT–S 520 Introduction to Statistics (3 cr.) P: MATH M212, M301, M303, or the equivalent. Basic concepts of data analysis and statistical inference, applied to 1-sample and 2-sample location problems, the analysis of variance, and linear regression. Probability models and statistical methods applied to practical situations and actual data sets from various disciplines. Elementary statistical theory, including the plug-in principle, maximum likelihood, and the method of least squares.

STAT–S 620 Introduction to Statistical Theory (3 cr.) P: STAT S320 and MATH M463 (or equivalent courses). Fundamental concepts and principles of data reduction and statistical inference, including the method of maximum likelihood, the method of least squares, and Bayesian inference. Theoretical justification of statistical procedures introduced in S320.

STAT–S 625 Nonparametric Theory and Data Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Survey of methods for statistical inference that do not rely on parametric probability models. Statistical functionals, bootstrapping, empirical likelihood. Nonparametric density and curve estimation. Rank and permutation tests.

STAT–S 626 Bayesian Theory and Data Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Introduction to the theory and practice of Bayesian inference. Prior and posterior probability distributions. Data collection, model formulation, computation, model checking, sensitivity analysis.

STAT–S 631 Applied Linear Models I (3 cr.) P: STAT S320 and MATH M301 or M303 or S303 (or equivalent courses), or consent of instructor. Part I of a 2-semester sequence on linear models, emphasizing linear regression and the analysis of variance, including topics from the design of experiments and culminating in the general linear model.

STAT–S 632 Applied Linear Models II (3 cr.) P: STAT S631, or consent of instructor. Part II of a 2-semester sequence on linear models, emphasizing linear regression and the analysis of variance, including topics from the design of experiments and culminating in the general linear model.

STAT–S 637 Categorical Data Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. The analysis of cross classified categorical data. Loglinear models; regression models in which the response variable is binary, ordinal, nominal, or discrete. Logit, probit, multinomial logit models; logistic and Poisson regression. Equivalent to EDUC Y637.

STAT–S 639 Multilevel Models (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Introduction to the general multilevel model with an emphasis on applications. Discussion of hierarchical linear models, and generalizations to nonlinear models. How such models are conceptualized, parameters estimated and interpreted. Model fit via software. Major emphasis throughout the course will be on how to choose an appropriate model and computational techniques. Equivalent to EDUC Y639.

STAT–S 640 Multivariate Data Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Elementary treatment of multivariate normal distributions, classical inferential techniques for

multivariate normal data, including Hotelling's T^2 and MANOVA. Discussion of analytic techniques such as principal component analysis, canonical correlation analysis, discriminant analysis, and factor analysis. Equivalent to PSY P654.

STAT–S 645 Covariance Structure Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Path analysis. Introduction to multivariate multiple regression, confirmatory factor analysis, and latent variables. Structural equation models with and without latent variables. Mean-structure and multi-group analysis. Equivalent to EDUC Y645.

STAT–S 650 Time Series Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Techniques for analyzing data collected at different points in time. Probability models, forecasting methods, analysis in both time and frequency domains, linear systems, state-space models, intervention analysis, transfer function models and the Kalman filter. Stationary processes, autocorrelations, partial autocorrelations, autoregressive, moving average, and ARMA processes, spectral density of stationary processes, periodograms, estimation of spectral density. Course equivalent to MATH M568.

STAT–S 655 Longitudinal Data Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Introduction to methods for longitudinal data analysis; repeated measures data. The analysis of change—models for one or more response variables, possibly censored. Association of measurements across time for both continuous and discrete responses. Course is equivalent to EDUC Y655.

STAT–S 660 Sampling (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Design of surveys and analysis of sample survey data. Simple random sampling, ratio and regression estimation, stratified and cluster sampling, complex surveys, nonresponse bias.

STAT–S 670 Exploratory Data Analysis (3 cr.) P: Two statistics courses at the graduate level, or consent of instructor. Numerical and graphical techniques for summarizing and displaying data. Exploration versus confirmation. Connections with conventional statistical analysis and data mining. Applications to large data sets.

STAT–S 670 Statistical Learning and High-Dimension Analysis (3 cr.) P: STAT S640, or two statistics courses at the graduate level, or consent of instructor. Dataanalytic methods for exploring the structure of high-dimensional data. Graphical methods, linear and nonlinear dimension reduction techniques, manifold learning. Supervised, semisupervised, and unsupervised learning.

STAT–S 681 Topics in Applied Statistics (3 cr.) P: Consent of instructor. Careful study of a statistical topic from an applied perspective.

STAT–S 682 Topics in Mathematical Statistics (3 cr.) P: Consent of instructor. Careful study of a statistical topic from a theoretical perspective.

STAT–S 690 Topics in Mathematical Statistics (4 cr.) P: Consent of instructor. Development of effective consulting skills, including the conduct of consulting sessions, collaborative problem-solving, using professional resources, and preparing verbal and written reports. Interactions with clients will be coordinated by the Indiana Statistical Consulting Center.

STAT–S 695 Readings in Statistics (1–3 cr.) P: Consent of instructor. Supervised reading of a topic in statistics.

STAT–S 710 Statistical Computing (3 cr.) P: STAT S620, or consent of instructor. Survey of numerical methods in statistics. Matrix factorizations and algorithms for linear regression. Nonlinear optimization, maximum likelihood and nonlinear regression. Pseudorandom number generation and Monte Carlo methods.

STAT–S 721 Advanced Statistical Theory I (3 cr.) P: S620, some knowledge of elementary measure theory, and/or consent of the instructor. Mathematical introduction to major areas of statistical theory and practice, including statistical models, sufficiency, likelihood inference, estimation and testing, Bayesian inference, decision theory, equivariance, and optimality of test statistics.

STAT–S 722 Advanced Statistical Theory II (3 cr.) P: S721 or consent of the instructor. A continuation of S721. A mathematical introduction to major areas of statistical theory and practice including multinomial models, canonical linear models, exponential families, asymptotic theory, and general linear models.

STAT–S 730 Theory of Linear Models (3 cr.) P: STAT S620, or consent of instructor. Theory of the general linear model. Distribution theory, linear hypotheses, the Gauss-Markov theorem, testing and confidence regions. Application to regression and to analysis of variance.

STAT–S 740 Multivariate Statistical Theory (3 cr.) P: STAT S721 and S722, or consent of the instructor. Multivariate normal distributions. Multivariate linear normal models, estimation and testing. Wishart distributions and models. Inference for the covariance matrix. Eigenvalues, including canonical correlations and principal components/ factor analysis.

STAT–S 781 Advanced Topics in Applied Statistics (3 cr.) P: Consent of the instructor. Careful study of an advanced statistical topic from an applied perspective.

STAT–S 782 Advanced Topics in Mathematical Statistics (3 cr.) P: Consent of the instructor. Careful study of an advanced statistical topic from a mathematical or theoretical perspective. As topics vary, this course may be repeated for credit.

STAT–S 799 Research in Statistics (1–6 cr.) P: Consent of the instructor. Research in statistics.

Telecommunications

College of Arts and Sciences
Curriculum

Degrees Offered

Master of Arts, Master of Science, Joint Master of Arts or Master of Science and Doctor of Jurisprudence (jointly with the School of Law), Joint Master of Arts or Master of Science and Master of Business Administration (jointly with the Kelley School of Business), and Doctor of Philosophy (Ph.D. telecommunications track in the Mass Communications Program).

Special Departmental Requirements

(See also general University Graduate School requirements).

Master of Arts Degree

The M.A. in Telecommunications is designed to train students for academic careers in communications and related fields. Graduates will be prepared to enter a Ph.D. program, teach at small colleges, or accept analytical and research positions in media and creative industries.

Admission Requirements

1. At least a B (3.0) average in an undergraduate program;
2. appropriate level of performance on the Graduate Record Examination General Test (all scores above 500 or verbal and quantitative scores above 500 and analytical score at or above 4.0);
3. statement of purpose;
4. three letters of recommendation;
5. completion of departmental background information form; and
6. paper TOEFL score greater than 600, computer-based TOEFL score greater than 250, or Internet-based TOEFL score greater than 100 for international students.

Applications from students who have not majored in communication at the bachelor's level are welcomed. If admitted, these students may be required to take supplementary courses.

Grades

B (3.0) average or above. Any semester's work averaging less than B will result in the student's being placed on academic probation. Accumulation of three individual course grades of C (2.0) or lower for graduate credit will result in dismissal of the student from the program. The department evaluates each student's progress toward the degree every year.

Advisory Committee

Each student will receive initial guidance from a faculty member assigned by the Director of Graduate Studies. During the second semester, each student will select a three-member Advisory Committee that will be responsible for approving the student's Program of Study, the thesis and granting approval for the degree. At least two members of the Advisory Committee must be from the Department of Telecommunications. Students who fail to select an Advisory Committee or construct a Program of Study by the end of the second semester in the program will be considered as making inadequate progress toward the degree.

Course Requirements

A minimum of 30 credit hours, including

1. T501 Philosophy of Inquiry in Telecommunications, T502 Introduction to Research Methods in Telecommunications, and either T503 Telecommunications Theory or T504 Tele-communications Policy Studies, with a grade of B (3.0) or above;
2. T800 Thesis: Telecommunications, normally taken for 6 credit hours;
3. Program of Study listing all courses toward the degree, approved by the student's Advisory Committee.

At least 21 credit hours must be taken within the Department of Telecommunications. Students must take at least three courses related to their thesis topic.

Thesis

Oral defense required, administered by the student's Advisory Committee.

Master of Science Degree

The M.S. in Telecommunications is designed to prepare students for professional careers in media design, production, and management.

Admission Requirements

1. At least a B (3.0) average in an undergraduate program,
2. appropriate level of performance on the Graduate Record Examination General Test (all scores above 500 or verbal and quantitative scores above 500 and analytical score at or above 4.0) for most MS applicants – check with the department for exceptions to this rule;
3. statement of purpose;
4. three letters of recommendation;
5. completion of departmental background information form; and
6. paper TOEFL score greater than 600, computer-based TOEFL score greater than 250, or internet-based TOEFL score greater than 100 for international students.

Applications from students who have not majored in communication at the bachelor's level are welcomed. If admitted, these students may be required to take supplementary courses.

Grades

B (3.0) average or above. Any semester's work averaging less than B will result in the student's being placed on academic probation. Accumulation of three individual course grades of C (2.0) or lower for graduate credit will result in dismissal of the student from the program. The department evaluates each student's progress toward the degree every year.

Advisory Committee

Each student will receive initial guidance from a faculty member assigned by the Director of Graduate Studies. During the second semester, each student will select a three-member Advisory Committee that will be responsible for approving the student's Program of Study, administering the final exam, and granting approval for the degree. At least two members of the Advisory Committee must be from the Department of Telecommunications. Students who fail to select an Advisory Committee or construct a Program of Study by the end of the second semester in the program will be considered as making inadequate progress toward the degree.

Course Requirements

A minimum of 36 credit hours, including

1. T505 Media Organizations, with a grade of B (3.0) or above;
2. one core course corresponding to a chosen concentration area, with a grade of B (3.0) or above:
   - Game Design Concentration: T580 Interactive Storytelling and Computer Games or
   - Management Concentration: T522 Managing the Creative Process;
3. Program of Study listing all courses toward the degree, approved by the student's Advisory Committee.

At least 18 credit hours must be taken within the Department of Telecommunications.
T800 Thesis: Telecommunications, T540 Special Projects in Telecommunications (independent study), and T575 Directed Group New Media Design Project may each be taken for up to 6 credits. Combined, degree-applied credits derived from these three courses should not exceed 12 total credits.
Final Examination

Students must pass a comprehensive written and oral examination, administered by the student's Advisory Committee. The exam consists of:

1. Written questions on core coursework, written questions on elective coursework, and an oral defense, **OR**
2. Written questions on core coursework, written questions on a media design project, and an oral defense.

Joint Degree: Master of Arts or Master of Science in Telecommunications and Doctor of Jurisprudence in the School of Law

To be eligible to receive the degrees of Doctor of Jurisprudence and Master of Arts or Master of Science in Telecommunications, which must be received simultaneously, a student must:

1. complete 79 semester hours of credit in the School of Law including all of the required course work;
2. complete 27 hours of credit in the Department of Telecommunications, including all of its required course work;
3. earn a cumulative grade point average of at least 2.3 on all work taken in the School of Law and at least 3.0 on all work taken in theDepartment of Telecommunications.

Joint Degree: Master of Arts or Master of Science in Telecommunications and Master of Business Administration in the Kelley School of Business

To be eligible to receive the degrees of Master of Business Administration and Master of Arts or Master of Science in Telecommunications, which must be received simultaneously, a student must:

1. complete 42 credit hours in the Kelley School of Business, including all of the required course work;
2. complete 27 credit hours for the Master of Arts in Telecommunications or 33 credit hours for the Master of Science in Telecommunications, including all of the required course work;
3. earn a cumulative grade point average of at least 3.0 on all work taken in the telecommunications program and a cumulative grade point average of at least 2.75 on all work taken in the Kelley School of Business;
4. be in residence for six semesters (or their equivalent of full-time resident study; three of these semesters must be in telecommunications and three must be in the Kelley School of Business).

Doctor of Philosophy Degree in Mass Communications: Telecommunications Track

The Department of Telecommunications, in cooperation with the School of Journalism, offers a doctoral program in mass communications.

Admission Requirements

1. Master's degree from a recognized institution;
2. at least a 3.5 grade point average in a master's program;
3. appropriate level of achievement on the Graduate Record Examination General Test (all scores above 500 or verbal and quantitative score above 500 and analytical score at or above 4.0);
4. statement of purpose;
5. three letters of recommendation;
6. completion of departmental background information form;
7. paper TOEFL score greater than 600, computer-based TOEFL score greater than 250, or Internet-based TOEFL score greater than 100 for international students;
8. writing sample.

Applications from students who have not majored in communication at the master's level are welcomed. If admitted, these students may be required to take supplementary courses. Consult the Director of Graduate Studies as to whether graduate credit might be granted for a non-communication master's degree and if supplementary course work is necessary.

Grades

As described above for master's programs.

Advisory Committee

Each student will receive initial guidance from a faculty member assigned by the Director of Graduate Studies. During the second semester, each student will select an Advisory Committee consisting of at least two members from the major area and one from another. Students who fail to select an Advisory Committee or construct a Program of Study by the end of the second semester in the program will be considered as making inadequate progress toward the degree.

Course Requirements

A minimum of 90 credit hours, including

1. The core consisting of T501 Philosophy of Inquiry in Telecommunications, T502 Introduction to Research Methods in Telecommunications, T503 Telecommunications Theory, and T504 Introduction

to Telecommunications Policy Studies with a grade of at least a B in each course;
2. T600 Proseminar in Telecommunications Research for four semesters;
3. 12 credit hours in a methodology area;
4. a minimum of six courses in the Department of Telecommunications if student is transferring 16-30 credits, eight courses if transferring 1-15 credits, and 10 courses (at least four completed after receipt of the M.A.) if student has an M.A. from this department;
5. completion of a minor as required by the minor department;
6. no more than 6 credits of independent study;
7. no more than 15 credit hours in the dissertation,
8. Program of Study listing all courses toward the degree, approved by the student's Advisory Committee.

Within these requirements, students design a rigorous and coherent individualized plan of study with the help of their advisory committee. This program is to be approved by the student's Advisory Committee, the Graduate Director (with the advice of the Graduate Committee), and the Department Chair by the end of the second semester of course work.

Minor

Consistent with University Graduate School policy, each student must have at least one minor subject. Course work in the minor must be approved by the student's Advisory Committee and must meet the requirements of the minor department.

Research Skill Requirement

12 credits of appropriate research skills courses approved by the student's Advisory Committee (see number 3 under "Course Requirements" above).

Qualifying Examination

Written and oral, covering the methodology area, the core, the minor, and the student's individualized areas of specialization.

Final Examination

Oral, primarily a defense of the dissertation.

Ph.D. Minor in Telecommunications

Doctoral students from other departments may choose telecommunications as an outside minor. A minimum of 15 credits in the department at the 500 level or above is required, including T501.

Faculty

Chairperson

Professor Walter Gantz*

Departmental E-mail:ttheodor@indiana.edu

Departmental URL: www.indiana.edu/~telecom

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Richard Burke* (Emeritus), Edward J. Castronova*, Barbara Cherry*, Susan Eastman* (Emerita), Walter Gantz*, Maria Elizabeth Grabe*, Annie Lang*, Michael McGregor*, Harmeet Singh Sawhney*, David H. Waterman*

Associate Professors

Erik Page Bucy*, Mark Deuze*, Julia R. Fox*, Robert Frank Potter*, Herbert A. Terry*

Assistant Professors

Andrew James Bucksbarg, Nicole Martins, Bryant M. Paul, Andrew Weaver

Director of Graduate Studies

Harmeet Sawhney*, Radio-TV Center,
(812) 855-0954

Courses

TEL–T 501 Philosophy of Inquiry in Telecommunications (3 cr.) Entry-level comparative study of the origin and development of dominant paradigms applied to telecommunications by researchers and policy makers.

TEL–T 502 Introduction to Research Methods in Telecommunications (3 cr.) Introduction to quantitative and qualitative research methodologies used in telecommunications.

TEL–T 503 Telecommunications Theory (3 cr.) Introduces students to the wide range of social scientific theories that guide research in telecommunications.

TEL–T 505 Media Organizations (3 cr.) Introduces students to the production, financing, marketing, and management of media from an organizational perspective. The goal is to prepare students to work in a changing media environment.

TEL–T 510 Research Methods in Message Analysis (3 cr.) Methods of analyzing the content of mediated messages. Applications of content analysis techniques to research projects involving new or traditional media.

TEL–T 511 Research Methods in Audience Analysis (3 cr.) Analysis of audience characteristics and behaviors. Emphasizes methods associated with the assessment of, and audiences for, the electronic media.

TEL–T 512 Communication and Politics (3 cr.) Social scientific theories of political message effects and normative models of media and democracy. Analysis of political advertising, campaign communication, civic participation, and the role of new media in politics.

TEL–T 521 Telecommunications Management (3 cr.) Theories of personnel and systems management applied to the technology-based consumer media of broadcasting, cable, voice, and network access providers. Considers broad issues of programming, infrastructure, finance, competition, corporate and industry structure, budget, and regulations.

TEL–T 522 Managing the Creative Process (3 cr.) Examination of the business side of video production with emphasis on the role of the producer and/or production

manager, including production team organization, schedules, budgets, contracts, markets, and intellectual property.

TEL–T 530 Legal Environment of Telecommunications (3 cr.) P: T504 or consent of instructor. Analysis of laws and policies affecting the telecommunications industry and its consumers. Regulation of broadcasting, cable television, telephony, and the Internet. Introduction to First Amendment aspects of telecommunications and to antitrust and intellectual property law.

TEL–T 532 Economics of the Media Industries (3 cr.) Application of economic principles to policy and strategy issues in the print, online, broadcasting, multichannel, home video, and motion picture industries.

TEL–T 535 Economics of Information (3 cr.) The production, distribution, and pricing of information products and services; intellectual property and new technologies; information networks and compatibility. Policy and strategy applications.

TEL–T 540 Special Projects in Telecommunications (1–3 cr.) P: Consent of project advisor and Chairperson. Individual readings or production projects in telecommunications.

TEL–T 551 Communication, Technology, and Society (3 cr.) P: Consent of project advisor and Chairperson. Research seminar to consider the impact of new technologies on society and how the development and structure of information and communication technologies have been influenced by society. Theories of technology at the social level of analysis.

TEL–T 552 Cognitive Approaches to Media (3 cr.) Examines the information processing of mediated messages and theories underlying memory, attention, and cognition. Advanced analysis of cognitive psychology and emotion theory as they apply to the study of media.

TEL–T 560 Business Strategies of Communication Firms (3 cr.) Case studies in marketing and competitive strategies of media and telecommunications firms. Effects of technological change on industry structure and strategy.

TEL–T 570 Art, Entertainment, and Information (1–3 cr.) Introduces students to the idea of information as art and as entertainment through readings and multimedia experience. Students will learn basic tools of multimedia design, interactive programming, digital paint and draw tools, and 3-D software.

TEL–T 571 Applied Cognitive and Emotional Psychology (3 cr.) Introduces students to basic theories in cognitive and emotional psychology and focuses on how these theories could be applied to the design of immersive mediated environments.

TEL–T 575 Directed Group New Media Design Project (3 cr.) P: Consent of Instructor. Group project in new media design. Each class will develop, design, and implement and new media project.

TEL–T 576 New Media Production (2 cr.) P: Consent of instructor. Training in traditional and new media production including utilization of new media software packages. In addition to production training, completion of a critical assessment paper in an area of production.

TEL–T 580 Interactive Storytelling and Computer Games (2 cr.) Students work in teams to develop interactive stories and games using graphics, animation, sound, and text.

TEL–T 583 Teaching Electronic Media Production (2 cr.) P: Consent of instructor. Graduate students review and refine basic production skills in preparation for teaching positions. Basic media production concepts, techniques, and hands-on training. Prior understanding of the production process is expected.

TEL–T 585 Interactivity and New Media (3 cr.) Theoretical and applied perspectives on interactive communications. Surveys the literature of interactivity and new media, examining relevant concepts such as parasocial interaction, entertainment education, and remediation. Social and psychological consequences of interactivity.

TEL–T 597 Internship (0–3 cr.) P: Consent of faculty advisor. Supervised internship in telecommunications, electronic media, or multimedia design.

TEL–T 600 Proseminar in Telecommunications Research (1 cr.) Introduction to current telecommunications research through the work of departmental members and visiting scholars.

TEL–T 601 Topical Seminar in Telecommunications Technology and Policy (1–3 cr.) P: Consent of instructor.

TEL–T 602 Topical Seminar in Telecommunications Processes and Effects (1–3 cr.) P: Consent of instructor.

TEL–T 603 Topical Seminar in Telecommunications Management (1–3 cr.) P: Consent of instructor.

TEL–T 605 Seminar in Immersive Mediated Environments (1 cr.) Introduction to current research in immersive mediated environments such as virtual reality, telepresence, and new media entertainment through the work of faculty members from Indiana University and visiting scholars.

TEL–T 610 The Networked Society (3 cr.) Analysis of the social, economic, and cultural forces that have set in motion the rise of the networked society. The conceptualization and creation of large-scale networks; new modes of organization.

TEL–T 629 Telecommunications Policy Making (3 cr.) P: T504 or consent of instructor. Models and theories of telecommunications policy making in the United States. Analysis of selected contemporary policy issues and controversies.

TEL–T 635 Comparative Telecommunications Policy (3 cr.) P: T504 or consent of instructor. Comparison of telecommunications policy and policy making in the United States with the policies ad policy systems of other nations and of international and transnational organizations.

TEL–T 641 Children and Media (3 cr.) P: T503 or equivalent. Detailed examination of theoretical orientations and research specifically focused on children and media.

TEL–T 642 Communication Campaigns (3 cr.) Study of public communication campaigns, emphasizing the role

of media in influencing attitudes and behavior related to social issues.

TEL–T 650 Telecommunications and the Constitution (3 cr.) P: T504 or consent of instructor. Impact of the Constitution of the United States on telecommunications law and policy, the telecommunications industries, and the public. Emphasis on the First Amendment. Analysis of the Supreme Court as a telecommunications policy making institution.

TEL–T 800 Thesis: Telecommunications (1–6 cr.) P: Consent of instructor. This courses are eligible for a deferred grade.

TEL–G 741 Ph.D. Research in Mass Communications (arr. cr.) P: Consent of instructor. This course is eligible for a deferred grade.

Theatre and Drama

College of Arts and Sciences

Departmental E-mail: theatre@indiana.edu

Departmental URL: www.indiana.edu/~thtr/

Curriculum

Degrees Offered

Master of Arts, Master of Arts for Teachers, Master of Fine Arts, and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Undergraduate major in the field or other evidence of adequate background. Deficiencies may be removed by course work or special examination. For M.A. and Ph.D. candidates, the Graduate Record Examination (GRE) General Test is required; non-native speakers of English are also required to have minimum TOEFL scores of 600 for the paper test, 250 for the computer-based test, and 100 for the Internet-based test. The GRE General Test is not required for M.F.A. applicants, but non-native speakers who are working on this degree must meet the University Graduate school minimum TOEFL scores of 550 (paper), or 213 (computer-based), or 80 (Internet-based). M.F.A. applicants are required to audition, interview, or submit examples of appropriate work for evaluation. For more detailed information on the application and admission process, please see the Department of Theatre and Drama Web site.

Master's Degrees

Master of Arts Degree

Course Requirements

A total of 30 credit hours, of which 15 credit hours must be in departmental courses numbered 500 and above, including T500; maximum of 5 credit hours in T895. Up to 10 credit hours may be taken in an allied field or area of specialization in another department.

Language Requirement

Ability to translate scholarly material on theatre from one foreign language.

Master's Essay

A student may satisfy the master's essay requirement in one of three ways:

1. By submitting a suitable term or seminar paper, revised to the satisfaction of a two-member faculty committee,
2. By writing an original master's essay not based on any previous paper, or
3. By writing a formal master's thesis (maximum of 5 credit hours in T895).

Examination

A written examination on the M.A. reading list in dramatic literature, theory, and theatre history. The examination may be repeated once.

Master of Arts for Teachers Degree

Course Requirements

A total of 36 credit hours. Of the 20 credit hours required in the major field, 15 must be in courses numbered 500 or above, including T500; up to 16 credit hours may be taken in an allied field or area of specialization in other departments.

Master of Fine Arts Degree

Special Requirements

Applicants must provide evidence of a high degree of technical skill and creative ability in the area of special interest. At the end of each year in residence, the student's skill and creative ability will be evaluated as evidenced by work done in the Department of Theatre and Drama. Only students who have clearly demonstrated growth and excellence will be permitted to remain in the program.

Course Requirements

A total of 60 credit hours of graduate work, with an emphasis in one of the following areas: acting, directing, scenic design, lighting design, costume design, or theatre technology. The 60 credit hours will include 3 credit hours in the study of resources and materials in the student's area of special interest and not fewer than 6 credit hours in the area of theatre history, dramatic theory, and dramatic literature. When appropriate, up to 12 credit hours (15 credit hours in costume design) may be taken in an allied field in another department. A maximum of 10 credits may be taken in M.F.A. thesis. The distribution of course work will be determined by the student and advisor. A minimum of four semesters or equivalent summer sessions must be spent in residence on the Bloomington campus.

Production Thesis

Required.

Examination

Oral defense of the thesis.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, of which 50-60 must be in the major field, including 30 credit hours of courses numbered

500 or above, at least 6 credit hours in advanced seminars, and 15 credit hours of dissertation.

Minor

Approximately 15 credit hours within another department in an area related to drama and theatre.

Other Provisions

To demonstrate an acquaintance with the tools, techniques, and reporting of theatre research, all Ph.D. students are expected (a) to have written a research thesis at the master's level (if not, a term paper or other evidence of research writing skill should be submitted); (b) to have taken a graduate-level course in research methods (if not, T500 must be taken in the first year of residence); and (c) to show an ability to translate scholarly material on theatre from two languages, usually selected from French, German, Russian, Italian, and Spanish. Consult the director of graduate studies for specific details and approval of language selections.

Examinations

Four comprehensive oral examinations (theatre before 1500, 1500-1800, 1800-1915, and 1915-present), and a qualifying examination (written and oral) in one specific area projected for dissertation investigation. Comprehensives may be taken individually, in any order, and at any time acceptable to both student and faculty. The qualifying examination may be taken only when all course work and language requirements have been completed. A representative from the student's minor field will be invited to participate in the qualifying examination. The student will be denied further participation in the doctoral program upon failing the qualifying examination twice.

Faculty

Chairperson

Jonathan Michaelsen

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Dale McFadden, Jonathan R. Michaelsen, George Pinney, Robert A. Shakespeare, Ronald H. Wainscott*

Associate Professors

Bruce E. Burgun*, Nancy Lipschultz, Murray McGibbon, Linda Pisano, Rakesh H. Solomon*, Fontaine Syer

Assistant Professors

Amy Cook*, Edris Cooper-Anifowoshe, Frederick Mahn Duer, Andrew Hopson

Faculty Emeriti

Leon Brauner*, Winona Fletcher*, Roger W. Herzel*, Howard J. Jensen*, Marion Bankert Michael, R. Keith Michael*, Wesley Peters, Dennis Joseph Reardon, Frank Silberstein

Director of Graduate Studies

Professor Ronald Wainscott*, Theatre Building A300

Courses

Required during the first term of residence:

THTR–T 500 Introduction to Graduate Study (1.5 cr.)

Acting/Directing

THTR–T 410 Movement for the Theatre (3 cr.) P: T121 or T120. Introduction to fundamental principles and methods focusing on kinesthetic awareness, posture, flexibility, coordination, relaxation, and physical characterization.

THTR–T 442 Directing II: Advanced Directing (3 cr.)

THTR–T 443 Directing III: Directing Style (3 cr.)

THTR–T 504 Stage Combat (3 cr.) Complete basic training in the safety techniques of theatrical violence, based upon the accepted practices of associations such as the Society of American Fight Directors, and utilized in theatres around the country. Emphasis will also be placed on acting the fight, storytelling, and historical styles of combat.

THTR–T 510 Advanced Movement for the Theatre I (3 cr.) P: Consent of instructor. The Dynamic Presence Training integrates Suzuki Technique with Aikido, Alexander, Circus, Slow Tempo, and more. It is designed for holistic performer training, and the development of a more dynamic stage presence.

THTR–T 511 Advanced Movement for the Theatre II (3 cr.) P: T510. Continuation of T510. II Sem.

THTR–T 513 Musical Theatre Dance Styles I (3 cr.) P: Consent of instructor. Dance styles of the 1920s through the 1950s will be explored and performed, including the choreographers Fred Astaire, Hermes Pan, Agnes de Mille, Jerome Robbins, and Gower Champion. Graduate students will be required to write a research paper within the context of the course's historical content and present results to the class.

THTR–T 514 Musical Theatre Dance Styles II (3 cr.) P: Consent of instructor. A continuation of Musical Theatre Dance Styles I, dance styles of the 1950s through present day will be explored and performed, including the choreographers Bob Fosse, Michael Bennett, Bob Avian, and Susan Stroman. Graduate students will be required to write a research paper within the context of the course's historical content and present results to the class.

THTR–T 516 Musical Theatre Showcase (3 cr.) P: Audition and consent of instructor. A professional course to better develop audition techniques, understanding of the business of show business, performance skills, and to showcase for agents and casting directors. Graduate students will be required to write a research paper within the context of the course's historical content and present results to the class.

THTR–T 520 Studies in Acting I (3 cr.) P: Consent of instructor. History and analysis of major theories of acting.

THTR–T 521 Studies in Acting II (1–3 cr.) P: Consent of instructor. Application of major theories of acting to performance.

THTR–T 522 Studies in Acting III (1–3 cr.) Analysis of script; application of vocal and physical techniques of characterization to various forms and types of drama.

THTR–T 525 Voice for the MFA I (3 cr.) P: Consent of instructor. Focuses on the student's understanding of breath and how breath marries with text. The student starts to think of breath as something authentic to the body and not a learned skill. The emphasis is on warm up, relaxation and letting go of vocal habit. Techniques employed: Berry, Rodenburg, and Linklater.

THTR–T 535 Voice for the MFA I (3 cr.) P: Consent of instructor. Focuses on the student's understanding of breath and how breath marries with text. The student starts to think of breath as something authentic to the body and not a learned skill. The emphasis is on warm up, relaxation and letting go of vocal habit. Techniques employed: Berry, Rodenburg, and Linklater.

THTR–T 542 Theories of Directing (3 cr.) P: Consent of instructor. History and analysis of major theories of directing. Lecture and practical projects.

THTR–T 543 Studies in Directing II (3 cr.) P: Consent of instructor. Practical problems in directing significant plays of diverse forms and styles.

THTR–T 545 Voice and Dialects (3 cr.) P: Consent of instructor. Training for the professional actor that focuses on combining imagery and imagination with the development of vocal technique through exercises in breathing, producing the sound resonance; the mastery of four of the most common dialects used in the American theatre.

THTR–T 610 Second Year Movement for the Theatre I (3 cr.) P: T511 In a continuation of the Dynamic Presence Training, students embark on an exploration of Grotowski's physical actor training, and its relationship to spontaneity, impulse, and freedom

THTR–T 611 Second Year Movement for the Theatre II (3 cr.) P: T610. Continuation of T610. II Sem.

THTR–T 625 Second Year Voice for the MFA I (3 cr.) P: T535 Emphasis on the examination of structure in scene work and how the structure of text frees the student to speak and communicate thought. Revisiting of the IPA and dialects for the stage through rhythm and placement of vocal focus. Techniques: Meier and David Alan Stern.

THTR–T 635 Second Year Voice for the MFA II (3 cr.) P: T625. Continued work with dialects. The course is designed to find the organic side of dialect work and to investigate how consistent dialect allows the listener to enter the world of the play. The emphasis is the creation of a relationship between form and content.

THTR–T 710 Third Year Movement for the Theatre (3 cr.) P: T611. Character class: An exploration of symbology, psychoanalysis, archetype, imagination and more, coupled with intense self-diagnosis. Culminates in the performance of transformative character work.

THTR–T 720 Internship in Acting (3–9 cr.) P: T611. Internship in a professional theatre for one semester or equivalent period of time. Required of all students seeking the M.F.A. in acting.

THTR–T 725 Internship in Acting (3–9 cr.) P: T611. Internship in a professional theatre for one semester or equivalent period of time. Required of all students seeking the M.F.A. in acting. May be repeated for a maximum of 9 credit hours.

THTR–T 735 Third Year Voice for the MFA II (3–9 cr.) P: T725. Dealing with vocal release and breath in the audition process. Examining physical and vocal stamina through a long run in the professional theatre and dealing with voice strain in different theatre spaces, including outdoor theatre.

Design/Technology

THTR–T 438 Advanced Stage Lighting Design (3 cr.)

THTR–T 502 Theatre Design and Technical Research Methods (1.5 cr.) P: T500 (S/F grading) Reading, discussion, and use of computer for scenic, costume, lighting, and technology research. Exploration of commercial software used in developing and communicating each discipline's products.

THTR–T 505 Design Research and Collaboration (1–3 cr.) Primarily for M.F.A. students in design and technology. Development of skills necessary for successful theatre productions, especially collaboration, research, communication (graphic and verbal), and presentation.

THTR–T 506 Fundamentals of Scenic Design (3 cr.) A studio course in the theory, process, and techniques of scenic design for the theatre. Topics include principles, elements, and concepts of design; script analysis; design concept development; creative research and its interpretation; and the communication and presentation of theatrical ideas.

THTR–T 523 Costume and Character in London Theatre (3 cr.) Overseas theatre studies in London. Experience theatrical character development through costume design. Survey social influences on costume and dress worn by characters through history, including contemporary trends and dress. Field trips to Bath and Stratford.

THTR–T 524 Theatrical Rendering and Model Building (3 cr.) A skills-based studio course with a concentration on theatrical rendering and model building techniques, craft, media; and visual communication.

THTR–T 524 Advanced Scenic Design I (3 cr.) P: T426 and permission of instructor. A graduate level studio course in the theory, process, and techniques of scenic design for the theatre. Topics will include script analysis; design concept development; creative research and its interpretation; and the communication and presentation of theatrical ideas. Particular emphasis is placed on design for specific theatre architecture

THTR–T 527 Theatre Planning (3 cr.) P: Consent of instructor. Function and design of theatre plant with attention to needs of audience and theatre personnel.

THTR–T 528 Studies in Stage Scenery (1–3 cr.) P: T526 or consent of instructor. Selected problems in designing stage scenery; composition and style.

THTR–T 529 Studies in Theatre Technology (1–3 cr.) P: Consent of instructor. The application of engineering methods to solve electronic, acoustical, optical, and mechanical problems; use of computer systems for information storage, manipulation, and retrieval; design and execution of projects.

THTR–T 530 Advanced Costume Design Aesthetics (3 cr.) Intensive study of costume design and application of design principles. Students will produce projects in various genres. Theatre, opera, ballet, and musical theatre are just some of the forms surveyed. Students work in a collaborative design arena that emulates the process for whichever genre they are designing in.

THTR–T 531 Costume Technology II (3 cr.) Provides a strong base in costume construction techniques for incoming graduate students. It provides a foundation of sewing, craft, fitting, and patternmaking techniques as well as training in team management from which the students may develop a construction project and perform assignments including supervisory roles in production work.

THTR–T 532 Design for Television and Film (3 cr.) P: Permission of instructor. Design based studio class in Production Design for Film and Television. Working from original scripts written specifically for the course, concepts include research, interpretation, and industry standard presentation techniques.

THTR–T 533 Studies in Stage Costuming (1–3 cr.) P: T430 and T433 or consent of instructor. Selected problems in costume materials and methods, costume design and historic fashion; application to styles and forms of theatrical production.

THTR–T 534 Historic Costumes for the Stage (3 cr.) P: Permission of instructor. Survey of historical costume in western civilization, ancient Mesopotamian cultures through the Twentieth Century. Taught from a socio-historical perspective and applied to performance theory.

THTR–T 536 Electronics for Theatre (3 cr.) Rudiments of electricity and electronics as applied to theatre. Investigation of current technology for theatrical performance, including power distribution, control systems, and creative applications for lighting, sound, special effects, and mechanized scenery.

THTR–T 537 Fundamentals of Costume Design (3 cr.) Intensive study of costume design in mainstream theatre. Projects in collaborative aesthetics in design and practical application, rendering techniques, and visual communication. No laboratory/technology component.

THTR–T 538 Studies in Stage Lighting (1–3 cr.) P: T435 and T438 or consent of instructor. Selected problems in the controllable properties and functions of stage lighting; optics, photometry, and instruments; control and dimming systems; application to styles and forms of theatrical procedure.

THTR–T 539 Fundamentals of Theatrical Drafting (3 cr.) A studio course consisting of both traditional hand drafting techniques and digital CAD techniques as they are used in theatrical production communication.

THTR–T 540 Structural Design for the Stage (3 cr.) P: Permission of instructor. Structural concepts of static mechanics and strengths of materials with focus on the ability to critically analyze and design efficient structures specific to theatre and performing arts applications.

THTR–T 541 History of Decor (3 cr.) A survey course examining the trends in architecture, painting, sculpture, furniture, and decorative motifs. The student will gain a distinction of periods while building an historic time line for use in theatrical design.

THTR–T 546 Stage Lighting Design (3 cr.) Stage lighting design concept development, presentation, and implementation are emphasized. Advanced lighting techniques and approaches. A practicum will be assigned.

THTR–T 547 Sound Design I (3 cr.) P: T347 or permission of instructor. Study of the practical use, aesthetics, and implementation of sound in theatre productions. Focus is on using computers to assist in the creation, selection, and playback of sound cues. Topics include sound system operation and design for both plays and musicals. Emphasis on researching, selecting, and recording music for production.

THTR–T 549 Production and Event Management (3 cr.) Discussion of the skills necessary to produce and manage theatrical productions, and the application of those skills to large events.

THTR–T 551 Stage Rigging I (1 cr.) Stage Rigging I is a survey of structural engineering terminology and methods as applicable to common rigging practice in the theatre and entertainment industry.

THTR–T 551 Stage Rigging II (1 cr.) Rigging II is a hands-on type course. This class is intended to familiarize the student with the operation and maintenance of typical rigging equipment. Class work includes counterweight systems operations, pin-rail operations, rope and knot basics, wire-rope basics, chain hoist basics, and arena-type rigging basics.

THTR–T 560 Understructures for Historical Garments (3 cr.) P: T430

THTR–T 561 Period Patternmaking and Construction (3 cr.) P: T430 or T562 Men's Tailoring

THTR–T 564 Pro Tools for Theatre and Music (3 cr.) P: MUS-A100 or THTR-T347 or THTR-T447. This course introduces the recording and editing software Pro Tools for use in theatre sound design and music production.

THTR–T 585 Theatre Management (3 cr.) Problems in managing a theatre: selection of plays, special programming, business operations, promotion, public relations. Lecture and practical projects.

THTR–T 585 Theatre Management (3 cr.) Problems in managing a theatre: selection of plays, special programming, business operations, promotion, public relations. Lecture and practical projects.

THTR–T 639 Advanced Theatrical Drafting (3 cr.) Advanced course in drafting methods, skills, and the specialized uses for theatrical drafting for productions. Mastery of students' graphic communication through standard theatre drafting methods.

History/Theory/Literature

THTR–T 460 Development of Dramatic Art I (3 cr.)

THTR–T 461 Development of Dramatic Art II (3 cr.)

THTR–T 462 Development of Dramatic Art III (3 cr.)

THTR–T 468 Non-Western Theatre and Drama (3 cr.)

THTR–T 501 Introduction to Historiography (1.5 cr.) P: T500. (S/F grading) Reading and discussion of current historiographical problems and methods particular to research and scholarly reporting in theatre history, theory, and literature.

THTR–T 550 Structure of Drama (3 cr.) Theory and structure of drama, based upon intensive reading of Aristotle's Poetics and other critical writings.

THTR–T 555 Theories of Theatre and Drama I (3 cr.) Survey of major theoretical and critical works. I. Greeks to c. 1890; II. 1890 to the present.

THTR–T 556 Theories of Theatre and Drama II (3 cr.) Survey of major theoretical and critical works. I. Greeks to c. 1890; II. 1890 to the present.

THTR–T 563 Forms and Styles in Modern Theatre and Drama (3 cr.) Study of plays in relation to such styles as realism, naturalism, expressionism, and absurdism.

THTR–T 565 American Drama and Theatre I (3 cr.) I. Beginnings to 1890; II. 1890 to the present. Either semester may be elected independently.

THTR–T 566 American Drama and Theatre II (3 cr.) I. Beginnings to 1890; II. 1890 to the present. Either semester may be elected independently.

THTR–T 567 European Drama from Molière to Ibsen (3 cr.) Representative French, German, Italian, and Russian plays.

THTR–T 568 Ibsen and Strindberg (3 cr.) Intensive study of the major plays of Ibsen and Strindberg.

THTR–T 570 Studies in Classical and Medieval Theatre (3 cr.) Concentrated study of Greek, Roman, and medieval theatre.

THTR–T 571 Studies in Renaissance and Baroque Theatre (3 cr.) Concentrated study of significant figures, practices, and dramas in the European theatre from 1500 to 1800.

THTR–T 572 Studies in Romantic and Realistic Theatre (3 cr.) Concentrated study of European and American theatre from 1800 to 1915. Emphasis on romanticism, realism, and the reactions to realism.

THTR–T 573 Studies in Modern and Contemporary Theatre (3 cr.) Concentrated study of significant practices, trends, and figures in the European and American theatre from 1915 to the present.

THTR–T 662 Comparative Theatre and Drama: Melodrama (3 cr.) The "third form" of drama, from melodramas of Euripides to tragicomedies and melodramas of modern television and motion pictures.

THTR–T 750 Seminar in Structure of Drama (3 cr.) P: T550, T555-T556 or equivalent. Projects in the analysis of different forms and types of drama. Each student is required to complete and report on a sequence of analytical interpretations of the structure of assigned plays.

THTR–T 765 Seminar in American Theatre and Drama (3 cr.) Selected topics.

THTR–T 774 Seminar in Stage Interpretation of Selected Plays (3 cr.) Study of selected plays through various periods; problems of interpretation and staging for present-day audiences.

THTR–T 775 Seminar in Theatre History (3 cr.) Selected problems concerning theatres and staging methods in Europe in a restricted period.

Playwriting

THTR–T 453 Playwriting I (3 cr.) P: T101 or permission of instructor. Introduction to principles of dramatic structure. Conferences and peer evaluations. Focus is on the creation and revision of a one-act play.

THTR–T 458 Screenwriting (3 cr.)

THTR–T 559 Studies in Playwriting (1–3 cr.) P: Consent of instructor. This course is recommended for specialists only, most generally for graduate students pursuing an M.F.A. in playwriting who are working on the advanced development of original full-length play scripts and screenplays. Admission requires the specific personal permission of Dr. Reardon. All other enrollees will be asked to drop.

Thesis and Special Courses

THTR–T 390 Creative Work in Summer Theatre (1–3 cr.)

THTR–T 500 Introduction to Graduate Study (1–5 cr.) may be repeated for a maximum of 6 cr. (S/F grading) Methods and expectations of theatre research and script exploration in graduate study. Must be taken in the first terms of residency.

THTR–T 583 Topics in Theatre and Drama (1–3 cr.) Studies in special topics not ordinarily covered in other departmental courses.

THTR–T 600 Directed Research (1–6 cr.) P: T500 or equivalent and consent of instructor. Individual supervised research projects.

THTR–T 700 Independent Study (arr. cr.) P: Consent of instructor and department chairperson. **These courses are eligible for a deferred grade.

THTR–T 701 Readings in Theatre and Drama (arr. cr.) **These courses are eligible for a deferred grade.

THTR–T 895 M.A. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

THTR–T 897 M.F.A. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

THTR–T 899 Ph.D. Thesis (arr. cr.) **These courses are eligible for a deferred grade.

Victorian Studies

College of Arts and Sciences

Departmental E-mail: victstu@indiana.edu

Departmental URL: www.indiana.edu/~victstu/

Curriculum

Graduate Area Certificate in Victorian Studies

The Victorian Studies Program concentrates upon Great Britain during the reign of Queen Victoria, extending its attention in certain fields back into the last decades of the eighteenth century, up to the outbreak of World War I, and out into America, Continental Europe, and other areas in the nineteenth century. The program is open to all graduate students. Courses within the program are chosen from a range of offerings in the following departments or programs: Comparative Literature, Cultural Studies, English, Fine Arts, Folklore, Gender Studies, History, History and Philosophy of Science, Philosophy, and Victorian Studies.

Course Requirements

16 credit hours in courses approved for the Victorian Studies Program, at least 4 of which must be in the Victorian Studies Program proper and 4 outside both the student's department and the Victorian Studies Program. Consult the chairperson of the program for courses outside of Victorian Studies that are acceptable for the certificate.

Examination

Satisfactory performance in the departmental qualifying examinations required.

Faculty

Chairperson

Professor Andrew H. Miller*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Susan Gubar* (Emerita, English)

Professors

Patrick Brantlinger* (Emeritus, English), Sarah Burns* (History of Art), Donald Gray* (Emeritus, English), Andrew H. Miller* (English), M. Jeanne Peterson* (Emerita, History), Dror Wahrman* (History), Stephen Watt* (English)

Associate Professors

Ivan Kreilkamp* (English), Joss Marsh* (English), Lee Sterrenburg (Emeritus, English)

Assistant Professor

D. Rae Greiner (English)

Academic Advisor

Professor Andrew H. Miller*, Ballantine Hall 429, (812) 855-2529, or contact Victorian Studies (812) 855-9533

Courses

VICT–V 611 Victorian Britain: Culture and Society, 1820-1900 (4 cr.) An examination of the civilization of Victorian Britain from a variety of perspectives, emphasizing problems of movement from a traditional to a modern society, industrial and democratic revolutions, and the rise and decline of Britain as a world power.

VICT–V 701 Studies in Victorian Britain (4 cr.) Interdepartmental investigation of topics related to Victorian Britain; their illumination of the whole period in method or substance.

VICT–V 711 Social Science and Social Philosophy in the Victorian Age (4 cr.) First part of course includes lectures on major philosophical and theoretical ideas underlying the approach of the Victorian period to economic and social questions; second part is based on research papers prepared by students on selected topics in their fields.

VICT–V 805 Readings in Victorian Britain (1–6 cr.)

Vision Science

School of Optometry

Departmental E-mail: opt@indiana.edu
Departmental URL: www.opt.indiana.edu

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Program Information and Requirements

The Vision Science Program is designed primarily for students wishing to prepare themselves for teaching and research in the sciences that relate to vision.

Admission Requirements

Course requirements are flexible to accommodate students with interests in vision science but with varying backgrounds. A bachelor's degree (or equivalent) is required. Course work with appropriate laboratories in the following areas is strongly recommended: optics, computing and engineering, physics, biology, mathematics through differential and integral calculus, statistics, and psychology of sensation and perception.

Degree Requirements

Students must demonstrate breadth of knowledge in vision science. This requirement is normally fulfilled by completion of 700 and V701with a minimum grade of B in each course.

Each semester, students are required to register for and participate in the weekly vision science seminar (V765) known as "Oxyopia." Participation implies that the seminar will be taken for credit and that the student will make a presentation. Students must complete ethics training, usually fulfilled by completion of V792.

Students commence their research training by joining an ongoing research project directed by a faculty member chosen by the student. The research topic will be formulated in consultation with the faculty member and an advisory committee. The topic may or may not be in the same field in which the student expects to do dissertation research.

Master of Science Degree

Course Requirements

A total of 30 credit hours is required, of which 15 credit hours must be didactic hours in vision science (or approved substitutes), generally excluding seminars. Students holding the O.D. degree or enrolled concurrently in the O.D. and M.S. programs may accelerate progress by receiving up to 4 graduate credit hours completed in the optometry curriculum. Students must complete courses that satisfy knowledge base in statistics, research design and vision science.

Research Requirements

Candidates must submit a written research report by the end of the first year in residence. Students enroll in a minimum of 3 hours of research credit per semester. A thesis research proposal must be submitted and approved by the end of the first year of study.

Thesis

Required.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours is required, of which 30 must come from didactic courses with grades of B or higher. Students holding the O.D. degree, or enrolled in the O.D. program, may apply up to 6 credit hours to this requirement of 30 didactic credit hours. When the grade point average of a student falls below 3.0, the student is placed on academic probation.

During the first year students will complete two Vision Science survey courses (V700 and V701).
Students will select at least one minor subject in any relevant field of study, subject to approval by their advisory committee. The requirements for the minor are determined by the department or program offering the minor. A specialized inter-departmental minor is also possible, if approved by the University Graduate School before classes are taken.

Vision Science Ph.D. Degree requirements:

In order to ensure adequate progress toward the Ph.D. degree, all students must achieve the following milestones at the end of years 1, 2, and 3 of the program.

Advancement to Second Year exam: At the end of the first year in the program each student must pass a written examination covering a wide selection of vision science topics in order to advance to the second year of the program. By this time, students should also have demonstrated an appropriate command of spoken and written English.

Advancement to Third Year: By the end of the second year all students should have identified the area of study and the specific experiments that will eventually constitute their Ph.D. thesis. This requirement will be met by submitting a formal abstract describing the proposed experiments to the Graduate Program coordinator. This abstract must be accompanied by written approval of the Ph.D. advisor.

Advancement to Candidacy: By the end of the third year, each student must complete a written and oral qualifying examination. These examinations are administered by the student's advisory committee. The written component is the dissertation proposal, and can be in the form of a grant application. The requirement of 30 credit hours of didactic course work must be fulfilled before the qualifying examination. After successful completion of the qualifying exam, each student will be advanced to candidacy for the Ph.D. degree. Participation in the Ph.D. program will be terminated if a student fails the qualifying examination twice.

The final milestone is completion of the dissertation.

Completion of Dissertation: After completion of the written dissertation, it is presented and defended at a scheduled seminar meeting. The dissertation must be approved by the student's research committee. The student is responsible for submitting the final approved dissertation to the University Graduate School.

The University Graduate School (UGS) provides a guide to the preparation of theses and dissertations. Related forms may be acquired from the IU School of Optometry Office of Student Administration.

Teaching: All doctoral students are required to participate in teaching, usually in the second or third year of their program.

Ph.D. Minor in Vision Science

Students from other departments who wish to minor in vision science should complete V700 and V701, Introduction to Vision Science I and II, and at least one other course from the following group: V705, V723, V754, V783, and V791.

Faculty

Faculty

Director

Professor William H. Swanson*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Carolyn B. Begley*, Joseph A. Bonanno*, Arthur Bradley*, Stephen A. Burns*, Robert DeVoe* (Emeritus), Ann E. Elsner*, David A. Goss*, S. Lee Guth* (Emeritus), Gary S. Hafner* (Emeritus), Gerald Eugene Lowther* (Emeritus), Victor E. Malinovsky, Edwin C. Marshall*, Paul Pietsch* (Emeritus), P. Sarita Soni*, William H. Swanson*, Larry Thibos*, Graeme Wilson*

Associate Professors

Clifford W. Brooks, T. Rowan Candy*, Ronald Everson* (Emeritus), Daniel R. Gerstman (Emeritus), Sally Hegeman (Emerita), Douglas G. Horner*, Don W. Lyon, Richard E. Meetz, Donald T. Miller*, S. P. Srinivas*, Suresh Viswanathan*

Assistant Professors

Shirin Hassan, Pete Kollbaum, Nicholas Port*

Academic Advisor

Professor Joseph Bonanno*, Optometry Building 522, (812) 856-5977

Courses

General

VSCI–V 595 First-Year Research (1–5 cr.)

VSCI–V 695 Second-Year Research (1–5 cr.)

VSCI–V 700 Introduction to Vision Science I (4 cr.) The first of a two-semester sequence of courses that provides a comprehensive introduction to vision science. The course is designed for graduate students enrolled in the Vision Science Program, but is also suitable for students from other disciplines who are interested in the eye and vision.

VSCI–V 701 Introduction to Vision Science II (4 cr.) The second of a two-semester sequence of courses on vision science. V700 and this course constitute a breadth requirement for Ph.D. students in vision science.

VSCI–V 703 Refractive Anomalies I (3 cr.) Optics and epidemiology of refractive anomalies of the human eye.

VSCI–V 704 Refractive Anomalies II (3 cr.) Development, progression, and management of myopia.

VSCI–V 705 Ocular Surface I: Basic Biology and Physiology (4 cr.) Basic biology and physiology of the ocular surface, including the cornea, conjunctiva, and tear film.

VSCI–V 716 The Visual Pathways (4 cr.) P: permission of the instructor For students in the visual sciences, comprehensive study of the human optic pathways.

VSCI–V 707 Retinal Imaging (2–3 cr.) The fundamental methods used in imaging the human retina will be examined, including types of illumination and delivery methods, optical techniques for detection, interaction of light and tissues, systems integration, and selection of imaging modalities based on scientific goals.

VSCI–V 717 Noninvasive Assessment of Visual Function (3 cr.) Focuses on the clinical application of psychophysical techniques for the detection and diagnosis of visual anomalies and ocular disease.

VSCI–V 716 Visual Functions in Low Vision (3 cr.) Studying behavioral aspects of visual function measurements in the low-vision population.

VSCI–V 723 The Eye as an Optical Instrument (4 cr.) P: V663 or equivalent

VSCI–V 754 The Motility of the Eye (4 cr.) P: V665 or equivalent. Quantitative and qualitative study of eye movements and myologic reflexes, monocular and binocular, and related phenomena.

VSCI–V 764 Cellular and Molecular Aspects of Ocular Disease and Injury (4 cr.) Study of selected reports dealing with corneal-wound healing, the cataractous lens, and retinal degenerations.

VSCI–V 765 Vision Sciences Seminar (1 cr.) Students in the Ph.D. program in vision science are required to take this seminar and make a presentation annually.

VSCI–V 767 Electrophysiology of Vision (3 cr.) Review of techniques of recording neural events, development of a neural hypothesis, experimental testing of hypothesis, writing and presenting of data and conclusions.

VSCI–V 768 Special Topics in Vision Science (1–4 cr.) Covers topics not offered on a regular basis. Possible topics include cell and molecular biology as it relates to the eye and vision, comparative studies of the vertebrate eye, current research, experimental design, optical and ophthalmic instruments, pathology, and pharmacology. May be taken more than once when different topics are covered.

VSCI–V 773 Classics in Physiological Optics (1 cr.) Study of selected scientific articles of early contributors to our understanding of ocular motility, monocular and binocular functions, the optics of the eye, and ocular physiology.

VSCI–V 783 Monocular Sensory Aspects of Vision (4 cr.) P: V666 or equivalent. A study of perceptual phenomena and responses facilitated by binocular vision.

VSCI–V 791 Quantitative Methods for Vision Research (3 cr.) Introduction to communication theory approach to problems in vision. Topics include the sensory nerve code, representation of nerve messages by orthogonal functions, sampling theorem, linear filters, Fourier analysis in one and two dimensions, analysis of directional data, stochastic processes, and signal detection theory.

VSCI–V 792 Ethical Issues in Scientific Research (1 cr.) This course explores the ethical issues and dilemmas raised by research in the biological sciences.

VSCI–V 793 Critical Evaluation of Peer Reviewed Publications in Vision Science (1 cr.) This course will provide experience to students to critically evaluate literature in the area of vision research. Students will meet for two hours each week for an eight week period. Evaluation will be based on attendance, reading assignments and class participation.

VSCI–V 795 Third-Year Research (3 cr.)

VSCI–V 799 M.S. Thesis Research (1–10 cr.)

VSCI–V 801 Basic Experimental Design and Methods in Vision Science (3 cr.) An introduction to basic research skills in vision science.

VSCI–V 899 Ph.D. Dissertation Research (1–12 cr.)

Optometry Curriculum

VSCI–V 501 Integrative Optometry I (2 cr.) Overall goal is to provide an integrated perspective of optometry in the paradigm of problem-based learning (PBL). The problems will be clinical cases that relate to the contents of courses taught contemporaneously in optics, biomedical, and ocular biology modules.

VSCI–V 502 Integrated Optometry II (2 cr.) Overall goal is to provide an integrated perspective of optometry in the paradigm of problem-based learning (PBL). The problems will be clinical cases that relate to the contents of courses taught contemporaneously in optics, biomedical, and ocular biology modules.

VSCI–V 512 Ocular Anatomy (2 cr.) P: V511 Human Gross Anatomy, or equivalent. A detailed study of the

normal anatomy and embryology of the eye and its adnexa. The organization of various components of the eye is studied at the light and electron microscopic level and this organization is related to the molecular structure where it is known.

VSCI–V 514 Neuroanatomy (1.5 cr.) P: V511 Human Gross Anatomy, or equivalent. Functional anatomy of the human brain, with emphasis on the visual system.

VSCI–V 516 Ocular Physiology (2.5 cr.) C: V512 or equivalent. Vegetative physiology of the eye, with attention to the chemical constitution, intermediary metabolism, regulation of hydration and intraocular pressure, transparency of the ocular components, and retinal physiology.

VSCI–V 521 Geometric and Visual Optics I (4 cr.) Fundamentals of geometric and physical optics. Optical analysis of myopia, hyperopia and astigmatism. Components of the eyes and their optical properties. Clinical instrumentation for optical measurement and diagnosis of eyes.

VSCI–V 523 Geometric and Visual Optics II (4 cr.) P: V521 or permission of instructor. Continuation of application of the principles of geometric and physical optics to the optical description and correction of the eye. Schematic optical models of the eye. Measurement of light. Higher-order aberrations and their impact on vision.

VSCI–V 540 Ocular Biology I (5 cr.) Head and neck neuroanatomy related to the normal functioning of the eye and visual system. Detailed anatomy/histology and physiology of the eye and adnexa. Maintenance of optical transparency and intraocular pressure. Phototransduction, retinal physiology, and the basis for the electroretinogram and electro-oculugram.

VSCI–V 542 Systems Approach to Biomedical Sciences I (4.5 cr.) First of a three semester sequence that presents basic science information organized into specific organ systems. The first module will cover common processes: basic biochemistry, cell and molecular biology, fundamentals of physiology, pharmacology, immunology/infection and oncology.

VSCI–V 543 Systems Approach to Biomedical Science II (4 cr.) Second of a three semester sequence which presents basic science information organized into specific organ systems. This module will discuss the structure, function, pathology and therapy for each organ system.

VSCI–V 550 Clinical Sciences I (3 cr.) Introduction to clinical history and interview techniques, health history content, and medical record documentation as applied to the optometric setting; optometric and medical terminology, interview techniques for special populations, legal aspects of medical records, differential diagnosis of visual symptoms, introduction to physical assessment, slit lamp biomicroscopy and ophthalmoscopy.

VSCI–V 551 Clinical Sciences II (4 cr.) Vision examination techniques, ocular diagnostic techniques, and theory and application of vision testing instrumentation, with emphasis on preliminary tests, refractive tests, and the ocular health exam; study of the principles involved in the measurement, epidemiology and treatment of ametropia, oculomotor imbalances and associated conditions.

VSCI–V 560 Vision Science I (3.5 cr.) This course provides an understanding of how visual performance is determined by the underlying biology of the eye and the brain. Topics include visual pathway neuroanatomy and physiology with special emphasis on the roles of receptive fields and neural sampling.

VSCI–V 601 Integrated Optometry 3 (2 cr.) Overall goal is to provide an integrated perspective of optometry in the paradigm of problem-based learning (PBL). The problems will be clinical cases that relate to the contents of courses taught contemporaneously in optics, biomedical, and ocular biology modules.

VSCI–V 602 Integrated Optometry 4 (2 cr.) Overall goal is to provide an integrated perspective of optometry in the paradigm of problem-based learning (PBL). The problems will be clinical cases that relate to the contents of courses taught contemporaneously in optics, biomedical, and ocular biology modules.

VSCI–V 631 Optics III Ophthalmic and Advance Clinical Optics (4 cr.) P: V523 or permission of instructor. Design and application of ophthalmic spectacles and materials. Optics of low vision. Obective refactions, fundus imaging, optics of diseased eyes, wavefront-based treatments.

VSCI–V 632 Optics IV: Optics of Ophthalmic and Contact Lenses (4 cr.) P: V631 or persmission V632 Optics IV: Advanced Clinical Optics (4cr) Continuation of design and application of ophthalmic spectacles and materials. Optics of low vision. Clinical aberrometry. Optics of refractive surgery. Optics of diseased eyes. Wavefront-guided refraction and treatments.

VSCI–V 633 Contact Lenses (4 cr.) Theory and practice of contact lenses. General principles of lens materials, design, care; examination, selection, fitting; diagnosis and treatment of lens wear problems; introduction to specialty fitting. Practical laboratory on lens handling, modification and fitting.

VSCI–V 644 Ocular Disease/Pharmacology I (3 cr.) P: V543. A detailed description of the signs, symptoms, differential diagnosis, and management of ocular disease of the anterior segment integrated with the principles and application of ocular pharmacology.

VSCI–V 648 Neurophysiology of Vision (2 cr.) Introduction to the functional organization of the visual system and the physiological basis of vision. This course treats the visual system as a biological image processor to reveal how the structure and function of the retina and brain determine visual performance and constrain the quality of vision.

VSCI–V 654 Clinical Sciences IV (4 cr.) P: 652 Advanced clinical analysis, procedures, and protocols for examinations of patients in the clinical setting, and comprehensive eye and vision examinations with scheduled patients; patient assessment and plan, patient communication; introduction to clinical ocular disease and protocols.

VSCI–V 663 Physiological Optics I: Visual Optics (3.5 cr.) P: V522 Geometric Optics II, or equivalent. The eye as an optical instrument.

VSCI–V 664 Physiological Optics II: Visual Function (2.5 cr.) The basic aspects of monocular vision, including light and dark adaptation, color vision, and both spatial and temporal resolution. The science of measuring visual performance and its application to clinical optometry.

VSCI–V 665 Vision Science II: Ocular Motility (3.5 cr.) Characteristics, control, and deficits of the five somatic eye-movement systems (convergence, saccadic version, pursuit version, fixation maintenance, vestibular reflex) and the autonomic systems subserving accommodation and pupillary diameter reflexes.

VSCI–V 666 Physiological Optics IV: Binocular Function (2.5 cr.) Binocular sensory mechanisms of vision. Summary of the geometry of three-dimensional space and stereo vision, underlying neuroanatomy and physiology of binocular vision, prerequisites for normal stereopsis, and commonly encountered anomalies of binocular vision.

Relevant Courses

Biology

L586 Cell Biology (4.5 cr.)

Statistics

S501 Statistical Methods I: Introduction to Statistics (3 cr.)
S503 Statistical Methods IIb: Generalized Linear Models and Categorical Data (3 cr.)

West Euroopean Studies

College of Arts and Sciences

Departmental E-mail: west@indiana.edu

Departmental URL: www.indiana.edu/~west

Curriculum

Academic Advising

Ballantine Hall 542, (812) 855-3280

Program Information

West European Studies (WEST) offers a Master of Arts degree in West European Studies, and two dual degree programs: a Master of Arts and a Master of Business Administration (M.A./M.B.A.) with the Kelley School of Business, and a Master of Arts and a Master of Public Affairs (M.A./M.P.A.) with the School of Public and Environmental Affairs. The West European Studies master's program offers a flexible yet rigorous approach to the study of modern Europe that combines courses in the social sciences, humanities, and languages to give students broad understanding of the politics, economics, history, and cultures of the countries of Western Europe and the European Union, while allowing the student to tailor the program to their interests. Students may focus on a particular country or region in Western Europe or on the European Union. The dual degrees add a level of professional training. M.A. graduates have in-depth knowledge about Western Europe and are prepared to work in a wide variety of positions in the public and private sector. Students may also choose to follow the master's degree with advanced graduate studies.

WEST also offers a Graduate Certificate and a Ph.D. minor for doctoral students.

Degrees Offered

Master of Arts, Master of Arts/Master of Business Administration (jointly with the Kelley School of Business), Master of Arts/Master of Public Affairs (jointly with the School of Public and Environmental Affairs)

Special Program Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission

Bachelor's degree and completion of the Graduate Record Examination. No language proficiency is required for admission, although knowledge of at least one West European language is recommended.

Course Requirements

A total of 30 credit hours of graduate course work, consisting of W301 (3 cr.), W401 (3 cr.), W501 (3 cr.), one W605 or cross-listed equivalent social science course (3 cr.), one W605 or cross-listed equivalent humanities course (3 cr.), plus 9-12 credit hours of electives and 3-6 credit hours of thesis.

Language Requirement

Proficiency in depth of one approved West European language plus reading knowledge in another European language appropriate to the student's program. The second language should relate to thesis research and must be approved by the advisor. Language requirements are explained in detail in the "Academic Regulations" section of this bulletin. Language proficiency exams are administered by the respective language departments.

Thesis

Required. The student must select a thesis advisory committee of at least three University Graduate School faculty members. West European Studies adheres to thesis format and printing requirements set by the University Graduate School. Master's theses are not to exceed 100 pages.

Dual Degree: Master of Arts in West European Studies and Master of Business Administration

West European Studies and the Kelley School of Business jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees can be combined for a total of 66 credit hours rather than the 84 credit hours required for the two degrees taken separately. The area studies require 30 hours of credit, 6 of which, taken through the Kelley School of Business, will count towards the M.A. degree. The other 24 hours of credit must be in accordance with the respective area studies program. Dual M.A./M.B.A. students expect to pay University Graduate School tuition rates for one academic year (two semesters) and the Kelley School of Business M.B.A. flat fee for two years

(four academic semesters) of the program. Both degrees must be awarded simultaneously.

Admission

To be eligible for the joint M.A./M.B.A. program, students must apply to the two master's programs separately. A student must submit an application to and be accepted by the Kelley School of Business for study toward the Master of Business Administration and by West European Studies in the Graduate School for study toward the Master of Arts degree. See "Master of Arts Degree" for admission requirements.

West European Studies Course Requirements

Students take 24 graduate credits in West European Studies under the course requirements for the M.A., including: W301 (3 cr.), W401 (3 cr.), W501 (3 cr.), one W605 or cross-listed equivalent social science course (3 cr.), one W605 or cross-listed equivalent humanities course (3 cr.), one general elective (3 cr.), 3-6 thesis credits.

Business Course Requirements

Forty-two graduate credit hours for the M.B.A. degree under the course requirements for the M.B.A. Full information about the M.B.A. program should be obtained from the Kelley School of Business M.B.A Program Office.

Language Requirements

Proficiency in depth of one approved West European language. Language requirements are explained in detail in the "Academic Regulations" section of this bulletin. Language proficiency exams are administered by the respective language departments.

Thesis

Required. The student must select a thesis advisory committee of at least three faculty members representing both WEST and the Kelley School of Business. West European Studies adheres to thesis format and printing requirements set by the University Graduate School. Master's theses are not to exceed 100 pages.

It is strongly advised that the student spend the first of the three-year program completing requirements for the M.A. (WEST) part of the program, and that the second year be spent in the first year of the M.B.A. program, thus allowing the third year to focus on electives and the thesis.

Dual Degree: Master of Arts in West European Studies and Master of Public Affairs

West European Studies (WEST) and the School of Public and Environmental Affairs (SPEA) jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees can be combined for a total of 60 credit hours rather than the 78 credit hours required for the two degrees taken separately.

Admission

To be eligible for the joint M.A./M.P.A. program, students must apply to the two master's programs separately. A student must submit an application to and be accepted by the School of Public and Environmental Affairs for study toward the Master of Public Affairs degree and by West European Studies in the Graduate School for study toward the Master of Arts degree. See "Master of Arts Degree" for admissions requirements.

West European Studies Course Requirements

Students take 24 graduate credits in West European Studies under the course requirements for the M.A., including: W301 (3 cr.), W401 (3 cr.), W501 (3 cr.), one W605 or cross-listed equivalent social science course (3 cr.), one W605 or cross-listed equivalent humanities course (3 cr.), one general elective (3 cr.), 3-6 thesis credits.

Master of Public Affairs Course Requirements

Students are required to complete 36 graduate credit hours comprised of the M.P.A. core and a specialized concentration. M.P.A. Core (18 cr.): V502 Public Management (3 cr.), V506 Statistical Analysis for Policy and Management (3 cr.), V517 Public Management Economics (3 cr.), V540 Law and Public Affairs (3 cr.), V560 Public Finance and Budgeting (3 cr.), V600 Capstone in Public and Environmental Affairs (3 cr.); Specialized Concentration (18 cr.): Students are required to develop a specialized concentration comprised of courses approved by School of Public and Environmental Affairs faculty advisors.

Language Requirements

Proficiency in depth of one approved West European language. Language requirements are explained in detail in the "Academic Regulations" section of this bulletin. Language proficiency exams are administered by the respective language departments.

Thesis

Required. The student must select a thesis advisory committee of at least three graduate school faculty members representing both West European Studies and the School of Public and Environmental Affairs. West European Studies adheres to thesis format and printing requirements set by the University Graduate School. Master's theses are not to exceed 100 pages.

Graduate Area Certificate in West European Studies

Area certificates can be awarded only in conjunction with a degree program and cannot be awarded prior to the completion of all requirements for the degree. Students must apply for admission and be accepted into another unit in the University Graduate School.

Course Requirements

A total of 30 credit hours, consisting of W301 (3 cr.), W401 (3 cr.), W501 (3 cr.), one W605 or cross-listed equivalent social science course (3 cr.), one W605 or cross-listed equivalent humanities course (3 cr.), plus 12 credit hours of electives that are offered through West European Studies or are approved cross-listed courses.

Language Requirement

Proficiency in depth of one approved West European language plus reading knowledge in another European language appropriate to the student's program. The second language must be approved by the advisor. Language requirements are explained in detail in the "Academic Regulations" section of this bulletin. Language

proficiency exams are administered by the respective language departments.

Ph.D. Minor in West European Studies

A Ph.D. minor in West European Studies is awarded as an outside minor to students who are pursuing a Ph.D. in another unit in the University Graduate School.

Course Requirements

A total of 12 graduate credit hours of West European area studies courses. These courses should include W301 and W401 (a waiver for either or both may be obtained from the director if the student has a knowledge of West European history and politics or if the student prefers to select another West European history or political science course), at least two W605 seminars or cross-listed equivalents. Students should select W605 seminars outside their major field. Waivers do not count toward meeting the 12 credit hour requirement. No more than 3 of the 12 credit hours may be in readings (W805) or independent research (W875).

Language Requirement

Reading knowledge of at least one approved West European language. Language requirements are explained in detail in the “Academic Regulations” section of this bulletin. Language proficiency exams are administered by the respective language departments.

Faculty

Director

Professor Lois R. Wise* (Public and Environmental Affairs)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor’s Professors

Roy Gardner* (Economics, West European Studies)

Robert H. Schaffer Class of 1967 Endowed Chair

William Corsaro* (Sociology)

Rudy Professors

Karen Hanson* (Philosophy)

Ameritech Endowed Chairs

David Audretsch* (Public and Environmental Affairs)

Distinguished Professors

David Audretsch* (Public and Environmental Affairs)

Courses

General

WEUR–G 599 Thesis Research (0 cr.)

WEUR–W 301 Modern European Politics and Society (3 cr.) The politics, economics, and social structures of Western European countries. Examination of selected domestic and international issues, including the welfare states, the European community, and West-East European relations.

WEUR–W 401 Topics in European Intellectual History (3 cr.) A survey of modern European intellectual history from the French Revolution to the present. Open to advanced undergraduate and graduate students.

WEUR–W 501 The Economics of European Integration (3 cr.) Study of the integration of the economies of the member states of the European Union (EU) since the Treaty of Rome; economic policy making institutions and the EU budget; economic theory of a customs union and a single market; imperfections in the single market, including unemployment; monetary integration, and monetary union; common policies and reforms; widening of the EU to the east and south; and emphasis on relevant current events.

WEUR–W 504 Model European Union (1–3 cr.) Analysis of the decision-making powers of the European Union (EU). Formal simulation of the EU.

WEUR–W 602 International Briefing (1–5 cr.) Covers three large regions: East Asia, Russia and Eastern Europe, and Western Europe. Team-taught by three specialists in politics, culture, and societies.

WEUR–W 605 Selected Topics in West European Studies (1.5-4–12 cr.)

WEUR–W 800 M.A. Thesis (arr cr.)**

WEUR–W 805 Individual Readings in West European Studies (1–8 cr.)

WEUR–W 875 Research in West European Studies (arr. cr.)

Modern Greek

WEUR–E 200 Second-Year Modern Greek (3 cr.) P: Students enrolling must have either taken E491 or placement examination. Course will build on language skills acquired during first semester. This will involve covering more advanced grammar, vocabulary, and developing writing skills. Emphasis placed on verbal expression. For graduate reading knowledge. Credit will not count toward degree.

WEUR–E 491 Elementary Modern Greek for Graduate Students (3 cr.) For graduate reading knowledge. Credit will not count toward degree.

WEUR–E 492 Readings in Modern Greek for Graduate Students (3 cr.) P: E491 Continuation of first semester. Credit will not count toward degree.

WEUR–E 580 Advanced Modern Greek I: Cultural Literacy and Current Events (3 cr.) This course, designed for students who have completed the equivalent of two years of Modern Greek study, assists advanced students in developing both their communicative competency in modern Greek and their awareness of Greek culture and society.

WEUR–E 581 Advanced Modern Greek II: Literature, History, and Cinema (3 cr.) This course assists advanced students in developing both their communicative competency and their awareness of Greek culture and history. In particular, the course will focus on improving language skills by engaging Greek history through literature and cinema.

WEUR–E 605 Topics in Modern Greek Society and Culture (3 cr.) Selected ideas, trends, and problems in modern Greek culture. Specific topics will be announced each semester.

Human Rights

Center for the Study of Global Change

Human Rights Director

Christiana Ochoa

Departmental E-mail: global@indiana.edu

Departmental URL: http://www.indiana.edu/~global/academic/rights.php

Graduate Faculty

Courses which meet the criteria of the Ph.D. Minor in Human Rights are taught by faculty from across the university.

Ph.D. Minor in Human Rights

The Ph.D. Minor in Human Rights requires students explore the intersection of global and local contexts at the heart of human rights discourse. It takes a holistic and multidisciplinary approach, asking students to be aware of how law, cultural values and practice, social and political institutions, national and supranational bodies, and policy interact, integrate, and conflict with one another to create an international human rights regime and the discourse and practice surrounding it. The program is applied as well as oriented to research and theory.

Course Requirements

The Ph.D. Minor in Human Rights consists of five classes totaling fifteen credits. All students are required to take a Multidisciplinary Graduate Seminar in Human Rights (I705) and two classes totaling six credits from a list of core courses that privilege the learning objectives of the minor in their content. Two elective courses totaling six credits are also required. Elective courses have been determined in consultation with faculty who teach the courses and after review of class syllabi. By minor completion, students will have completed coursework in three academic areas beyond their own disciplines. Students are also allowed to request other course options, in consultation with their advisors and the Human Rights Minor Director.

I705 Multidisciplinary Graduate Seminar on Human Rights (3 cr.) This multidisciplinary seminar is the gateway course for the Ph.D. Minor in Human Rights, though students from all graduate programs and schools with interests in human rights are welcome to attend.

Required Core Course: Anthropology (3 cr.)

- **ANTH E600** Seminar in Cultural and Social Anthropology; Topic: Anthropology of Human Rights

Required Core Course: Law (3 cr.)

(One of these two Law courses are required):

- **LAW B793** Human Rights
- **LAW L793** Seminar in Human Rights

Two Electives (6 cr.) Selected from list available on minor website.

Courses

GRAD–I 705 Human Rights Multidisciplinary Graduate Seminar (3 cr.) This is the core course for the Ph.D. Minor in Human Rights. Like the minor, it emphasizes a global and multidisciplinary approach that is as theoretical as it is applied. The overall goal of this seminar is to help graduate students generate a framework for research and practice that investigates human rights and which incorporates various perspectives and complements students' disciplinary and regionally specific academic interests. The seminar is designed to stimulate students to think critically about a broad range of theoretical and methodological issues involved in human rights research, including ethics, legalities, relativism and universalism, the intersection of the global and local, and research concerns from different disciplinary perspectives.

Fort Wayne

English and Linguistics

College of Arts and Sciences

Departmental E-mail: aasandh@ipfw.edu

Departmental URL: www.ipfw.edu/engl

Curriculum

Degrees Offered

Master of Arts (M.A.) and Master of Arts for Teachers (M.A.T.), Certificate in Teaching English as a New Language (TENL)

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

To be regularly admitted to a master's program in English, you must have completed an undergraduate major or minor in English with a cumulative GPA of at least 3.0 (B) and a GPA of at least 3.0 in all English courses. In addition, all applicants must earn a satisfactory score on the general aptitude section of the Graduate Record Examination. If these requirements are not met, an applicant may be admitted conditionally. Conditions might, for example, require completing prerequisite courses without credit toward the graduate degree, or maintaining a given GPA over the first 6–12 credits earned in the program.

To receive the M.A.T., you must hold at least provisional public school certification in English. If you lack such certification when you enter the program, you must fulfill certification requirements while you complete the M.A.T. requirements.

Degree Requirements

Separate requirements apply to the M.A. and M.A.T. degrees, although you must maintain a GPA of 3.0 while in either program and you must complete all degree requirements within five years of your admission.

Master of Arts

Course Requirements

To earn this degree, you must complete at least 36 credit hours in courses administered by the department. (Courses are generally 3 credits.)

Your program must include a core of the following 4 courses: Professional Scholarship in Literature (ENG B501), Professional Scholarship in Writing studies (ENG C517), Professional Scholarship in Linguistics and Language (ENG L505), Critical Theory (ENG B605). It must also include 4 courses in 1 of 5 available concentrations: (1) British literature before 1700, (2) British literature after 1700, (3) American literature, (4) Writing Studies, (5) English language and linguistics. The remaining 12 hours may be satisfied with electives from courses administered from the department. At least 6 of your 36 hours must be 700-level seminars. You may, with your advisor's approval, apply courses that satisfy core requirements to your concentration requirements. If you do, you must still complete enough elective courses to meet the required minimum of 36 credits. No course with a grade below B will count toward the degree.

It is recommended that students who plan to pursue a doctorate in literary study demonstrate reading proficiency in an approved foreign language under the auspices of the Department of International Language and Culture Studies by passing (1) a 300-level literature course in a foreign language with a grade of A or B, or (2) a written examination that demonstrates a student's proficiency in reading and translating a foreign language.

Although a thesis is not required, a student is welcome to write one. A thesis carries 3 hours of credit, and may be counted as part of the electives rubric for the curriculum.

Master of Arts for Teachers Degree

Prerequisite

Provisional public school certification in English. Students without provisional certification must fulfill certification requirements as well as requirements for the M.A.T.

Course Requirements

To earn this degree, you must complete at least 36 credit hours of graduate-level courses. (Courses are generally 3 credits). At least 24 credits must be in courses administered by the Department of English and Linguistics, including one course in linguistics or the English language, one course in composition theory or rhetorical theory, and one course in ethnic or minority literature. Up to 12 of the 36 required credits may be elected from courses administered by another department and approved by your advisor. For example, if you are working toward certification, some graduate-level education courses may count as electives for the M.A.T.

Foreign Language Requirement

None.

Thesis (3-6 cr.)

You must either take a 700-level seminar or write a thesis.

Graduate Certificate in Teaching English as a New Language (TENL)

The Graduate Certificate in Teaching English as a New Language is intended primarily for students working toward a graduate degree in English and for practicing teachers who wish to be trained in teaching English to nonnative speakers. It also serves people who are preparing to live abroad or who wish to facilitate their employment abroad, and those who have technical or business expertise and wish to work with nonnative speakers in professional settings. The required courses will familiarize students with the major theoretical foundations of teaching English as a new and foreign language. Students will become acquainted with ENL pedagogy and resources and will acquire experience by teaching ENL learners in real classrooms. The TENL certificate can stand alone as a separate credential or be integrated with the requirements of the M.A. or M.A.T. program in English.

Course Requirements

Grammar

ENG G500 Introduction to the English Language (3-4 cr.)

Methods

LING P511 Methods and Materials for TESOL I (3 cr.)
LING P512 Methods and Materials for TESOL II (3 cr.)

Language Acquisition

LING L532 Second Language Acquisition (3 cr.)

Sociolinguistics

LING L619 Language and Society Practicum (3 cr.)

Practicum

LING L535 TESOL Practicum (3 cr.)

For further information, contact Professor Hao Sun, TENL Certificate Program Coordinator, Department of English and Linguistics, Indiana University–Purdue University Fort Wayne, 2101 E. Coliseum Blvd., Fort Wayne, IN 46805-1499, telephone (260) 481-6775, e-mail sunh@ipfw.edu.

Faculty

Chairperson

Professor Hardin Aasand

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Hardin Aasand, Mary Ann Cain, Avon Crismore, Rodney Farnsworth, Lawrence Friedman (Emeritus), George Kalamaras, John Minton, Beth Simon, Michael L. Stapleton

Associate Professors

Stevens Amidon, John P. Brennan (Emeritus), Beverly Hume*, Michael Kaufmann, Lidan Lin, Richard Ramsey

(Emeritus), Lewis Roberts, Arline Standley (Emerita), Hao Sun, Chad Thompson

Assistant Professors

Rachel Hile, Troy Bassett, Damien Fleming, Debrah Huffman, Suzanne Rumsey, Sara Webb-Sunderhaus

Director of Graduate Studies

Professor Michael L. Stapleton, Liberal Arts Building 109, (260) 481-6772

Courses

Literature

The following courses are taught in the Department of English and Linguistics at the Fort Wayne campus.

ENG–B 501 Professional Scholarship in Literature (3 cr.) Materials, tools, and methods of research.

ENG–B 502 Introduction to Literacy Studies and the Teaching of College English (3 cr.) Provides an overview of literacy studies while also focusing on the literacy practices and beliefs of particular groups. The course moves beyond reductive discussions of literacy by introducing students to a range of literacy studies scholarship that challenges popular conceptualizations of literacy.

ENG–B 605 Critical Theory (3 cr.) Survey of contemporary critical approaches to literary, language, and rhetorical studies.

ENG–B 612 Chaucer (3 cr.) Critical analysis of The Canterbury Tales, Troilus and Criseyde, and selected shorter poems.

ENG–B 613 Middle English Literature (3 cr.) Selected themes and writers in English from 1100 to 1500.

ENG–B 622 Elizabethan Poetry (3 cr.) Spenser and other major Elizabethan poets.

ENG–B 624 Elizabethan Drama and Its Background (3 cr.) English drama, excluding Shakespeare, from the Middle Ages to 1642.

ENG–B 625 Shakespeare (3 cr.) Critical analysis of selected texts.

ENG–B 627 English Poetry of the Early Seventeenth Century (3 cr.) Major poets and their intellectual milieu, 1600–1660.

ENG–B 628 Milton (3 cr.) Poetry and prose, with special attention to Paradise Lost, Paradise Regained, and Samson Agonistes.

ENG–B 635 British Literature 1660-1790 (3 cr.) Poetry and nonfiction prose. Emphasis on Dryden, Pope, Swift, and Johnson and his circle.

ENG–B 637 Restoration and Eighteenth-Century Drama (3 cr.) English drama from 1660 to 1800.

ENG–B 639 British Fiction to 1800 (3 cr.)

ENG–B 642 Romantic Literature (3 cr.) Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and other writers of the British Romantic movement.

ENG–B 644 Victorian Literature (3 cr.) Poetry and nonfiction prose from 1837 to 1900.

ENG–B 645 British Fiction 1800-1900 (3 cr.)

ENG–B 648 Twentieth-Century British Poetry (3 cr.)

ENG–B 649 Twentieth-Century British Fiction (3 cr.)

ENG–B 651 American Literature 1800-1865 (3 cr.)

ENG–B 652 American Literature 1865-1914 (3 cr.)

ENG–B 654 American Literature since 1914 (3 cr.)

ENG–B 655 American Fiction to 1900 (3 cr.)

ENG–B 656 Twentieth-Century American Fiction (3 cr.) American fiction since 1900, including such writers as Dreiser, Lewis, Fitzgerald, Hemingway, and Faulkner.

ENG–B 657 Recent Writing (3 cr.)

ENG–B 660 Studies in British and American Writers (3 cr.)

ENG–B 666 Survey of Children's Literature (3 cr.) Survey of literature for children and adolescents from the medieval period to the present.

ENG–B 668 Topics in Children's Literature (3 cr.) Study of a period, a genre, or a group of writers. May be repeated once for credit with a different topic.

ENG–B 673 Studies in Women and Literature (3 cr.) Women writers and literary representations of women.

ENG–B 675 Studies in American Ethnic and Minority Literature and Culture (3 cr.)

ENG–B 680 Special Topics in Literary Study and Theory (3 cr.) Readings in sociological, political, psychological, and other approaches to literature.

ENG–B 688 Irish Literature and Culture (3 cr.) Study of one writer, a group of writers, a period, or a genre.

ENG–B 695 Individual Readings in English (1–3 cr.) Independent study.

ENG–B 699 Master's Thesis (3–6 cr.)

ENG–B 712 Chaucer (3 cr.) P: ENG B612, B613, or equivalent.

ENG–B 725 Shakespeare (3 cr.)

ENG–B 731 Milton (3 cr.)

ENG–B 733 Restoration and Augustan Literature (3 cr.)

ENG–B 739 British Fiction to 1800 (3 cr.)

ENG–B 741 Romantic Literature (3 cr.)

ENG–B 743 Victorian Literature (3 cr.)

ENG–B 745 British Fiction 1800-1900 (3 cr.)

ENG–B 749 Twentieth-Century British Literature (3 cr.)

ENG–B 751 Major American Writers 1700-1855 (3 cr.)

ENG–B 753 Major American Writers 1855 to the Present (3 cr.)

ENG–B 780 Special Studies in British and American Literature (3 cr.)

Writing and Rhetoric

ENG–C 501 Teaching of Composition in College (1–2 cr.) Practical teaching of composition; current theories and policies.

ENG–C 505 Teaching Composition: Issues and Approaches (2–3 cr.) P: Permission of instructor. Fundamental issues in the teaching of writing. Topics include teaching invention and revision, diagnosing errors, teaching style and organization, making assignments, and evaluating student writing.

ENG–C 507 Writing Center Theory and Praxis (3 cr.) Examines techniques for responding to writers in writing centers, including nontraditional populations and writers in various disciplines. Understand and test cognitive, social constructionist, and collaborative theories through consulting in the writing center mentored by experience writing consultants and the director. Write journals, a case study outline, and a paper linking theory to practice.

ENG–C 511 Writing Fiction (3 cr.) P: Permission of the instructor.

ENG–C 513 Writing Poetry (3 cr.) P: Permission of the instructor.

ENG–C 517 Professional Scholarship in Writing Studies (3 cr.) Students will explore the development of the writing studies discipline through the past five decades, paying particular attention to the growth of creative writing, rhetoric and composition, professional writing, and literacy studies as academic fields of inquiry.

ENG–C 521 Introduction to Professional Writing (3 cr.) Discourse in professional disciplinary contexts (e.g., engineering, sciences, social sciences, humanities). Emphasis on research tools in professional writing and on methods of contextual, intentional, structural, and stylistic analysis.

ENG–C 531 Theory and Practice of Exposition (3 cr.) Primarily for secondary-school and junior-college teachers of English.

ENG–C 532 Advanced Argumentative Writing (3 cr.) Techniques for analyzing and constructing arguments for different disciplines and professions, especially the use of proofs, evidence, and logic; major issues of argument, such as the ethics of persuading audiences and the uses of style.

ENG–C 565 Theories and Practices of Editing (3 cr.) Students will examine textual and literary approaches to editing, given particular rhetorical contexts. Emphasis will be placed on how to make editorial judgments that promote editorial standards without violating authorial intent.

ENG–C 567 Writing for Multiple Media (3 cr.) Introduces principles and practices of multimedia design and implementation, with emphasis on writing in multimedia contexts. Students will consider ways in which new media affect the production and reception of writing and its relationship to other forms of communication (e.g., oral and visual).

ENG–C 576 Writers Reading (3 cr.) Investigation of how writers, readers, and texts are shaped within the contexts of literature, composition, and professional writing. Focus on using current conventions more consciously and flexibly to generate new ways of reading and writing that better serve our specific needs, desires, and goals.

ENG–C 590 Internship in Writing (3 cr.) A supervised internship in uses of language in the workplace. Evaluations by workplace supervisor and reports to faculty supervisor, including a portfolio of completed assignments and an evaluation of the internship experience are required.

ENG–C 601 History of Rhetoric (3 cr.) Development of rhetorical theory from Plato to the present, including the influence of historical rhetoric on present-day composition theory.

ENG–C 602 Contemporary Theories of Composition (3 cr.) Current research in rhetoric and composition. Draws on insights from linguistic theory, cognitive theory, and rhetorical theory to develop greater understanding of the writing process and build pedagogical applications.

ENG–C 611 Writing Fiction (3 cr.) P: C511 or permission of the instructor.

ENG–C 613 Writing Poetry (3 cr.) P: C513 or permission of the instructor.

ENG–C 620 Publications Management and Production (3 cr.) Explores the document production process and asks students to practice this process by individually creating a suite of publications and by working with a team of writers to produce a published book or website. Students study theories of publication and production as applied to writing groups.

ENG–C 622 Creativity and Community (3 cr.) This course addresses questions of what it means to create and be creative--as writers, scholars, teachers, professionals and citizens-within the contexts of various communities. The course's main purpose is to develop each participant's creativity in ways that will enhance their participation in the discourse communities of their choosing.

ENG–C 625 Research Methods for Professional Writers (3 cr.) Examines quantitative, qualitative, and action research practices of professional writers in the light of contemporary theories of researched writing. Takes students through the process of designing a scholarly or organizational research project, and the completion of the research proposal or prospectus.

ENG–C 682 Topics in Rhetoric and Composition (3 cr.)

ENG–C 697 Independent Study in Writing (1–3 cr.)

ENG–C 780 Special Studies in Rhetoric and Composition (3 cr.)

Language

ENG–D 501 Introduction to the English Language (3 cr.) An introduction to the nature, structure, and development of the English language.

ENG–D 552 Linguistics and the Teacher of English (3 cr.) Topics in applied English linguistics, intended for English teachers at all levels.

ENG–D 600 History of the English Language (3 cr.) Survey of the evolution of the English language from its earliest stages to the present, with reference to its external history and to its phonology, morphology, syntax, and vocabulary.

ENG–D 601 Introduction to Old English (3 cr.) Introduction to the phonology, morphology, and syntax of Old English and intensive reading of major prose and verse texts.

ENG–D 660 Stylistics (3 cr.) Survey of traditional and linguistic approaches to the study of prose and poetic style. Attention to the verbal characteristics of texts, what they reflect about the author, and how they affect the reader.

Cross-Listed Courses

Comparative Literature

- C541 Modern Drama (4 cr.)
- C586 Colloquium in Literature and the Other Arts (4 cr.)
- C592 Genre Study in Film (3 cr.)

Film

- K502 Genre Study in Film (3 cr.)

Linguistics

- L430 Language Change and Variation (3 cr.)
- L485 Topics in Linguistics (3 cr.)
- L505 Professional Scholarship in Language Study and Linguistics (3 cr.)
- L534 Linguistic Resources and the Teaching of English as a Second-language (TESOL) (3 cr.)
- L535 TESOL Practicum (3 cr.)
- L543 Syntactic Analysis (3 cr.)
- L575 Introduction to Linguistic Theory (3 cr.)
- L619 Language and Society (3 cr.)
- L690 Variable Title (1-4 cr.), to match the undergraduate offerings

Liberal Studies

College of Arts and Sciences

Departmental E-mail: kaufmann@ipfw.edu

Departmental URL: www.ipfw.edu/libstudies

Curriculum

Program Director

Associate Professor Michael E. Kaufmann

Degree Offered

Master of Liberal Studies, an interdisciplinary graduate degree in arts and sciences. The degree provides an opportunity for students to study the liberal arts and sciences beyond the bachelor's degree. It is intended primarily for those who regard the liberal arts as subjects for lifelong learning and for those who, because their undergraduate curriculum was primarily professional, wish to broaden their general education. The Master of Liberal Studies is not intended as preparation for doctoral study.

Admission Requirements

For regular admission, students must have completed an undergraduate degree from an accredited institution with a grade point average of B or higher overall. Applications are accepted at any time, but a deadline of August 1 is recommended for admission to the program for the fall semester, and December 1 for the spring semester. Request application materials from the program director, Associate Professor Michael E. Kaufmann, at (260) 481-6760 or (260) 481-6019.

Course Requirements

To earn the Master of Liberal Studies degree, students must complete at least 30 hours of courses approved for graduate credit, including D501 Humanities Seminar, D502 Social Sciences Seminar, D503 Science Seminar, either D500 Graduate Project or D700 Topics in Liberal Studies, and 18 credits in electives from at least two disciplines in arts and sciences. In consultation with the program director, each student designs a course of study appropriate to his or her interests and experience.

Grades

No course with a grade lower than B will be counted toward the degree.

Courses

LBST–D 500 Graduate Project (3–6 cr.) Independent project to be undertaken in consultation with graduate advisor. This project requires students to demonstrate mastery of some specific topic or medium of expression.

LBST–D 501 Humanities Seminar (3 cr.) An interdisciplinary graduate seminar in the humanities. Topics vary from semester to semester.

LBST–D 502 Social Science Seminar (3 cr.) An interdisciplinary graduate seminar in the social sciences. Topics vary from semester to semester.

LBST–D 503 Science Seminar (3 cr.) An interdisciplinary graduate seminar in the sciences. Topics vary from semester to semester.

LBST–D 700 Topics in Liberal Studies (3 cr.) P: Completion of two 500-level liberal studies seminars or consent of program director. Intensive study of major issues in the humanities, social sciences, or sciences. Interdisciplinary approach, seminar format. Individual project required. Specific topic announced in the Schedule of Classes.

Sociological Practice

College of Arts and Sciences

Departmental URL: www.ipfw.edu/sociology

Departmental E-mail: morganm@ipfw.edu

Curriculum

Degree Offered

Master of Arts in Sociological Practice

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Baccalaureate degree including a major in sociology or related discipline with a grade point average of

3.0 (B). Application for admission must include an essay demonstrating that writing skills and career objectives are in line with the program and three letters of recommendation. Students who have not completed an undergraduate degree in sociology may be admitted contingently if they have completed the courses Methods of Social Research, Sociological Theory, and Sociological Statistics with a B or higher, or agree to complete these undergraduate classes before they are allowed to enroll in their graduate equivalents.

Course Requirements

A total of 33 credit hours, including 18 credit hours in the areas of principles of sociological theory and practice, statistical techniques in sociological practice, applied research methods, professional development, and 6 credit hours of practicum in sociological practice or 6 credit hours of master's thesis research, plus 15 credit hours of electives in other approved graduate courses.

Grades

Students must complete each course with a grade of B or higher.

Faculty

Chairperson

Professor Peter Iadicola

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Peter Iadicola, Michael Nusbaumer, Anson Shupe*, Diane E. Taub, Augusto De Venanzi

Associate Professors

Patrick Ashton*

Assistant Professors

Christopher Bradley, Donna Holland, Mieko Yamada

Graduate Advisor

Anson Shupe*, 2101 E. Coliseum Blvd., Fort Wayne, IN 46805-1499, (260) 481-6667

Courses

SOC–P 510 Seminar on Organizations and the Individual (3 cr.) Focuses on the interplay between social structural factors and individual actions. Examines basic principles of social organizations as well as variations in types of organizational arrangements. Explores impact of organizational structures on individual behavior and attributes, and the implications of various behavioral strategies adopted by individuals functioning within organizations.

SOC–P 514 Health and Health Care Issues (3 cr.) P: Graduate standing. An investigation of health and the health care system in the U.S. with focus on issues, problems, and alternatives for policy reform.

SOC–P 517 Social Stratification and Social Practice (3 cr.) This course examines social stratification as both an area of scientific inquiry and sociological practice. Course content covers the historical and cross-cultural variations in social stratification, systems of inequality, and the social policies associated with addressing inequality.

SOC–P 540 Principles of Sociological Theory and Practice (3 cr.) P: Undergraduate course in social theory. This course will introduce graduate students to the theoretically informed practice of sociology. Students will develop the ability to use social theory in the analysis of society and social life.

SOC–P 550 Statistical Techniques for Sociological Practice I (3 cr.) P: One basic undergraduate statistics course. Course focuses on how to use statistical analysis to answer common questions in the practice of sociology as well as on what statistical techniques are useful to answer sociological practice questions, how to apply them and interpret their results. Specific methods to be covered include documentary, ethnographic, survey, experimental design, secondary data analysis, social indicators, focused literature reviews, and library research techniques.

SOC–P 560 Topics in Sociological Practice (3 cr.) This is a graduate seminar in selected topic areas in sociology, exploring the nature of sociological practice within each area (e.g., policy issues and/or intervention strategies as applied to health).

SOC–P 562 Topics in Policy Analysis (3 cr.) P: Graduate standing. Graduate seminar in selected topic areas in sociology, focusing on the analysis of social policy within each area.

SOC–P 570 Applied Research Methods (3 cr.) P: Undergraduate course in sociological research methods. Course covers the methodological tools and practical knowledge needed to conduct applied social research. Students will be exposed to a variety of methods and will learn how to choose the most appropriate method for specific research problems and settings, and understand advantages and disadvantages for each.

SOC–P 576 Graduate Seminar in Sociological Pedagogy (3 cr.) Develop and refine personal teaching philosophy, learn the standards of good course design, explore learning styles, and examine best practices in course delivery and student assessment. Exposure to the field of the scholarship of teaching and learning.

SOC–P 578 Mediation and Conflict Resolution Strategies (3 cr.) Explores the nature of conflict in human social relations and strategies for conflict resolution. Students will learn and practice techniques for proactively and constructively dealing with interpersonal and intergroup conflict. Successful completion of course will enable student to be a certified community mediator in a variety of disputes.

SOC–P 650 Statistical Techniques for Sociological Practice II (3 cr.) P: Graduate standing and P550 or equivalent. Designed to be a continuation of study of statistics as they are used by the practitioners of social science. Explores intricacies of statistical procedures most likely needed by practitioners including factor analysis and index construction, measures of association, and simple and multiple regression.

SOC–P 670 Advanced Applied Research Methods (3 cr.) P: Graduate standing and P570. Designed to

provide greater depth of knowledge for topics discussed in P570 such as focus groups, case studies, survey research, needs assessment, and outcome evaluations.

SOC–P 695 Independent Research in Sociological Practice (1–3 cr.) P: Permission of instructor and completion of P540, P550, and P570. Provides the student an opportunity to engage in independent research under the guidance of a faculty member. The student works with a faculty member in developing and carrying out a research plan. Course requirements are negotiated between the student and the supervising faculty member.

SOC–P 697 Professional Development (3 cr.) P: Graduate standing. Covers professional socialization into the practice of sociology, including professional ethics, grantwriting, development of various types of proposals, professional organizations and services, and developing a career as a practicing sociologist.

SOC–P 698 Practicum in Sociological Practice (3 cr.) P: Permission of the program director, all core courses and 12 credit hours in approved electives. First semester, students will develop a research proposal and obtain necessary approvals. Second semester, students work with a client organization, produce a report, present findings. May be taken multiple times; only 6 credit hours count toward the completion of degree requirements.

SOC–P 699 Master's Thesis Research (3 cr.) P: Permission of program director, all core courses and 12 credit hours in approved electives. First semester, students develop a research proposal and obtain necessary approvals. Second semester, students carry out applied research, produce a thesis, and present findings. May be taken multiple times; only 6 credit hours will count toward degree requirement.

Indianapolis

Anatomy and Cell Biology

School of Medicine

Departmental E-mail: gradanat@iupui.edu

Departmental URL: anatomy.iupui.edu

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Bachelor's degree, preferably with a background in general, cellular, and molecular biology; developmental biology; general and organic chemistry; physics; and calculus. Candidates should have a minimum grade point average of 3.0 (B) overall, and 3.0 in science courses. The Graduate Record Examination General Test or MCAT is required. It is preferable that graduate study be started in the fall semester. Application for admission to the Master of Science program requires sponsorship by a graduate faculty member. Completed applications should be received before January 15. A personal interview may be requested. Applicants will be notified of departmental action by April 15.

Master of Science Degree

Requirements

The master degree in Anatomy & Cell Biology is offered as an independent degree, and is not required as a prerequisite for the doctoral degrees. Requirements are 30 credit hours, including D850, D851, and D852, along with two years of D861 (Seminar). Applications will be considered only after the potential student has reached a mentoring agreement with the faculty member in whose laboratory the research work will be done. This is a two-year, full-time program. A masters candidate will prepare a written document (paper or thesis) based on original research work, and successfully defend it as a final examination before the advisory committee, which will consist of the mentor and two other faculty members.

Doctor of Philosophy Degree

The Department of Anatomy & Cell Biology offers two PhD tracks. The Research Track is for students looking to pursue careers in laboratory research and students enter through the Indiana BioMedical Gateway Program (IBMG), and the Education Track is for students who desire a career focus in teaching and educational research.

Course Requirements for Research Track

A total of 90 credit hours, including Biomedical Science I, II, and III (G715, G716, G717), three research rotations (G818), Research Communication Seminar (G655), Ethics (G505), Statistics (G855), Seminar (D861, second year and each year following), and two courses in the anatomical sciences (from D501, D502, D527, D850, D851, D852, D853, G817). A minimum of 32 credit hours must be in courses other than dissertation research.

Course Requirements for Education Track: A total of 90 credit hours, including D861, and all of the following: D850, D851, D852, D878, and G804. Approved courses in education and statistics also are required. A minimum of 64 credit hours must be in courses other than dissertation research.

Minor

A minimum of 12 credit hours of course work other than dissertation research in a related program (e.g., biochemistry, biophysics, education, medical genetics, microbiology, neurobiology, pathology, pharmacology, physiology, statistics, toxicology, or life science). For a minor in life science, at least 6 credit hours must be taken in one department. The minor must be approved by the student's advisory committee.

Other Requirements

Research Track students are required to gain experience in teaching by assisting one semester in one of the departmental courses. Education track students are required to teach at least three semesters in three different departmental courses.

Grades

Overall B (3.0) average in course work and no less than a B- in any required course.

Qualifying Examination

Written and oral, designed to assess the student's preparedness to carry out a research program.

Final Examination

Oral defense of dissertation.

Further details of departmental policies will be made available to the student on request and at the time of enrollment.

Faculty

Chairperson

Professor David Burr*

Graduate Advisor

James C. Williams*, Ph.D., Chair of Graduate Studies Committee, 635 Barnhill Drive, MS5055Y, Indianapolis, IN 46202-5120, (317) 274-3423, jwillia3@iupui.edu

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Patrick W. Bankston*, Teresita Bellido*, Joseph P. Bidwell*, David B. Burr*, Andrew P. Evan*, Vincent H. Gattone*, Ralph Jersild* (Emeritus), Carl F. Marfurt*, James McAteer*, Brian O'Connor* (Emeritus), Mark F. Seifert*, Joel A. Vilensky*, James C. Williams*, Zao Cheng Xu*, Hiroki Yokota (Engineering and Technology), Feng C. Zhou*

Associate Professors

James J. Brokaw*, Kenneth E. Byrd*, Taihung Duong*, Eri Hashino* (Otolaryngology), Roger C. Hoversland, Michael J. Kubek*, Nancy J. Mangini*, Margaret M. Moga, Dale W. Saxon, Robert D. Sweazey, Donald Wong*

Assistant Professors

Matthew R. Allen*, Lilian Plotkin*, Alexander G. Robling*, William Truitt*

Adjunct Professors

Bonnie Blazer-Yost* (Biology, Physiology, and Biophysics), Simon Conway* (Pediatrics), Alan Mikesky* (Physical Education), Michael Pritz* (Neurosurgery), David Suzuki* (Ophthalmology)

Adjunct Associate Professors

Robert Bacallao (Medicine), Anthony Firulli, Wei-Hua Lee* (Pediatrics), Jack Windsor* (Dentistry), Laura Torbeck (Surgery)

Adjunct Assistant Professors

Angela Bruzzaniti (Dentistry-Oral Biology), Melissa Kacena (Biomedical Engineering, Orthopaedic Surgery), Feng-Chun Yang* (Pediatrics)

Courses

ANAT–D 501 Functionally Oriented Human Gross Anatomy (5 cr.) P: K101 Concepts of Biology I or K103 Concepts of Biology II, or K331 Embryology, or equivalent. Consent of instructor. Introduction to the concepts, terminology, and basic structure of the human body. Prosection of the body will use a regional approach. Emphasis on providing fundamental knowledge of the structure/function of major organ systems, peripheral nervous system, and vascular supply to the trunk, head and neck, limbs, and back.

ANAT–D 502 Basic Histology (4 cr.) P: K103 or K324. Lecture and laboratory instruction on the microscopic structure of the basic tissues and organs of the body. Previous exposure to gross anatomy principles and dissection encouraged.

ANAT–D 526 Methods in Cell and Neurobiology (4 cr.) Didactic and laboratory instruction in contemporary methods used in modern cell biology and neurobiology research. Methods range from cellular to molecular. Each method is taught by a faculty member with expertise and experience in that area.

ANAT–D 527 Graduate Neuroanatomy (4 cr.) P: Any undergraduate biology or anatomy course, or approval of the course director. A neuroanatomy/neurobiology course that introduces the student to terminology, pathways, organization, and concepts of the human nervous system. It is designed for those seeking a doctoral or terminal Master of Science degree in a department other than anatomy, or for students in interdisciplinary programs such as psychology, medical and biological engineering, and the medical neurobiology program.

ANAT–D 533 Neural Substrate for Sensory-Motor Control (3 cr.) This is an advanced graduate course that will build upon the neuroanatomic foundation established in ANAT D527. The goal is to give functional meaning to the neural systems involved with acquiring behaviorally relevant information and transforming this information into signals that guide behavior. The emphasis will be on neuronal signal processing.

ANAT–D 850 Gross Anatomy (8 cr.) A survey course of human anatomy including a complete dissection.

ANAT–D 851 Histology (4 cr.) A complete survey of the microscopic structure of the tissues and organs of the body.

ANAT–D 852 Neuroscience and Clinical Neurology (5 cr.) P: Gross anatomy or instructor approval. A multidisciplinary course integrating basic neuroscience with clinical neurology in understanding the human nervous system and neurological disorders. Includes the neurologic exam in presentations of neurologic patients, neuroradiologic imaging, and histologic atlas cross-sections in studying internal organization and vasculature of the brain and spinal cord.

ANAT–D 853 Human Developmental Anatomy (4 cr.) P: D850, D851, and D852. A correlative study of prenatal and neonatal form and function. Odd years.

ANAT–D 856 Advanced Histology (1–5 cr.) In-depth consideration of selected topics on the microscopic anatomy of cells, tissues, and organs.

ANAT–D 860 Research (1–10 cr.)

ANAT–D 861 Seminar (1 cr.) Required yearly for all graduate students in residence. Literature and research

reports and discussions by faculty, students, and invited distinguished visitors.

ANAT–D 862 Anatomical Techniques (2 cr.) Introduction to techniques in anatomical research and in preparation of teaching materials.

ANAT–D 863 Peripheral Nervous System (2–3 cr.) Anatomical and functional consideration of sensory, motor, and autonomic portions of the peripheral nervous system, with emphasis on neurotransmission and its regulation, physiology of receptors, neuromuscular junction, peripheral axons and their central regulation, myelination, and axonal transport.

ANAT–D 864 Advanced Gross Anatomy (arr cr.) P: D850. Functional, clinical, and developmental gross morphology of specific regions of the human body; special topics may vary.

ANAT–D 865 Developmental Neuroanatomy (3 cr.) Basic principles and problems relating to prenatal and postnatal development and aging of the central nervous system.

ANAT–D 866 Electron Microscopy with Laboratory (2 cr.) P: D851 or equivalent, and consent of instructor. Introduction to electron microscopy, including lectures and laboratory. The application of techniques, biological specimen preparation (rationale and practical aspects), instrument operation, and image processing for both scanning and transmission electron microscopy are included. Special techniques and their application will be discussed.

ANAT–D 868 Histology of Immune System: Lecture (2 cr.) P: D851. Current information on cells, tissues, and organs that participate in cellular and humoral immune reactions. Cytochemical methods for elucidating these reactions. Attention given to cellular aspects of immune mechanisms in cancer and organ transplantations.

ANAT–D 869 Histology of Immune System: Laboratory (arr cr.) P: D868 or concurrent. Enrollment limited. The fluorescent antibody technique, enzyme-labeled antibody technique, electron microscopic immunocytochemistry, the isolation and observation of lymphocytes, and cytochemistry of marrow smears.

ANAT–D 870 Tissue Culture: Lecture (2 cr.) P: D871 concurrently. Study of living animal cells and tissues maintained in an artificial environment with emphasis on growth, differentiation, and their response to various factors.

ANAT–D 871 Tissue Culture: Laboratory (2 cr.) P: D870 concurrently. Application of laboratory techniques used in preparation of in vitro cultures, and their use in biomedical research.

ANAT–D 875 Topics in Advanced Neuroanatomy (2–5 cr.) Examination of the anatomy and related physiology and neurochemistry of selected brain areas. Topics will include regional structures (in spinal cord, brain stem, diencephalon, or telencephalon) or specific neurological systems (sensory, motor, or autonomic-visceral). Area of study to be arranged with instructor.

ANAT–D 876 Neurotransmitter and Neuroendocrine Cytology and Anatomy (3 cr.) Detailed examination of the cytology and connections, chemical and physiological regulatory mechanisms, interactions, and functions of neurotransmitter or neurohormonal cells, including central neurons utilizing dopamine, norepinephrine, epinephrine, serotonin, acetylcholine, amino acid transmitters, substance P, and endorphins. Regulation and function of neuroendocrine transducers related to anterior and posterior pituitary, adrenal medulla, pineal.

ANAT–D 878 Anatomy Teaching Practicum (2 cr.) P: Consent of instructor. This course is designed to provide each student with supervised teaching experiences in gross anatomy, histology, and neuroscience, as well as critical reviews of all teaching duties.

ANAT–D 888 Developmental and Molecular Neurobiology (3 cr.) This is an in-depth course in neurobiology designed to help students understand the molecular and cellular mechanisms that underlie the development and normal and abnormal functions of the nervous system. Special emphasis will be placed on both experimental and theoretical approaches that led to our current knowledge of the nervous system.

ANAT–G 595 Current Topics in Cell Structure and Function (3 cr.) P: D851 or F705 or B817 or consent of instructor. An advanced course in cell biology designed to evaluate contemporary issues in cell structure and function. Background lectures are complemented by discussion of primary research articles. Emphasis is on developing a critical approach to the cell biology literature by evaluating the effectiveness and limitations of various experimental strategies.

ANAT–G 801 Experimental Approaches to Cell Structure and Function (3 cr.) The overall objective of this graduate course in cell biology is to present, in an experimental context, information integrating cell structure with cell function. The focus is on topics in which new information on cell structure has enhanced or reformulated our understanding of cell function.

ANAT–G 812 Fundamental Concepts in Aging (3 cr.) A survey course covering various processes and diseases of aging. The course includes sections on demography and epidemiology; physiology, molecular biology, and pharmacology of aging; specific clinical disease entities commonly associated with aging; neurodegeneration, memory, and cognition; depression; the pathophysiology of pain, nutrition, physical function, ethics, and psychosocial issues.

ANAT–G 818 Integrative Cell Biology (3 cr.) This course provides broad understanding of ways in which cells are organized and integrated into tissues. Emphasis is on the function of cells in neural/neuroendoctrine system, cardiopulmonary, renal, and immune systems in the cytomechanics. Modern approaches to the study of tissue function by analysis of cellular regulation will be emphasized.

ANAT–G 819 Basic Bone Biology (2 cr.) P: One semester of introductory biology. An introduction to basic bone biology, including bone morphology, composition, and physiology; cell biology of bone cells; measurement techniques; adaption to the mechanical and metabolic environments; regulatory factors and mineral homeostasis; and growth and development.

Anthropology

School of Liberal Arts

Departmental E-mail: anth@iupui.edu

Departmental URL: liberalarts.iupui.edu/anthropology/

Curriculum

Degrees Offered

- M.A. in Applied Anthropology
- Graduate Minor in Anthropology and Health
- Master of Arts in Applied Anthropology

Master of Arts in Applied Anthropology

Program Overview

The M.A. in Applied Anthropology, IUPUI, offers students the opportunity to use anthropological theories and methods toward the goals of solving real world problems. The program is constructed around a set of core courses together with independent research and internships. The degree takes advantage of our long-standing departmental strengths in Public Archaeology, Urban Anthropology, International Development, Globalization, Medical Anthropology and Museum Studies. Students may choose to follow a targeted curriculum, focusing on a particular aspect of the discipline; all students will also be well-trained in a broad range of anthropological approaches.

Admission

In line with the criteria established by the Indiana University Graduate School, students wishing to be admitted to the MA program in Anthropology must – at a minimum – have a Bachelor's degree from an accredited institution, with a GPA of at least 3.0 (on a scale of 4.0). We use as a guideline for admissions GRE scores averaging at least 500 in each area; students who demonstrate other strengths and good preparation for the program may be accepted at the discretion of the Anthropology Department Graduate Committee and with the approval of the Graduate School. Appropriate work experience and undergraduate coursework will also be taken into account in making decisions about admission. For applicants whose native language is not English, or who have not received a degree from a certified American university, a minimum TOEFL score of 79 on the current IBT examination (equivalent to scores of 550 and 213 on prior versions of the examination) would be required. An IELTS score of 6.0 or above may substitute for the TOEFL.

Applicants are required to submit a statement of interest, three letters of recommendation, an undergraduate transcript, and GRE scores. Admission decisions will be made by a three-member Anthropology Department Graduate Committee, and approved by the Graduate Office at IUPUI on behalf of the Graduate School.

Course Requirements:

A total of 36 credit hours, including a core curriculum consisting of 6 credits of required core courses (E501; A565); 3 credits of a methods course in the student's sub-disciplinary area; 21 credits of elective courses; and 6 internship or thesis credits. Course electives may be chosen both from within and outside of Anthropology including appropriate cognate courses from programs that are already well-developed at IUPUI including Museum Studies, Urban Policy (SPEA), Urban Education, Geographic Information Systems (GIS), Community Nursing, and Public History.

Courses:

A560 Graduate Topics in Anthropology (3 cr.) This seminar course provides a conceptual examination of selected topics in the field of anthropology. May be repeated for up to 9 credits.

A565 Anthropological Thought (3 cr.) This course traces the development of anthropological theory from the early 20th century up to the present. Students will examine what is distinctive about an anthropological perspective and will analyze how anthropological ideas have shifted over the last century in accordance with the emergence of new social and political imperatives.

B526 Human Osteology (3 cr.) Descriptive and functional morphology of the human skeleton with emphasis on the identification of fragmentary remains. Determination of age, sex, and stature; craniology; and research methods in skeletal biology. Guided research project in the identification of skeletal material required.

E501 Fundamentals of Applied Anthropology (3 cr.) This is a graduate-level introduction to the history and underlying principles of Applied Anthropology. We will examine how understanding a specifically anthropological perspective can provide new insights into the workings of contemporary social policies and programs.

E507 Popular Culture (3 cr.) This course studies how traditional anthropological insight can analyze social and political complexities of contemporary popular cultural phenomena. Focuses on how anthropological subjects such as class, racism, and regionalism lurk within popular cultural phenomena including post-1950 music subcultures, civil religion, and consumer culture.

E509 Modern Material Culture (3 cr.) This course examines how contemporary social experience is impacted by material culture ranging from toys to theme parks. Focuses on how consumers perceive themselves and others in modern consumer culture through the medium of commodities and examines systems of inequality that are reproduced and subverted through consumption.

E521 Indians of North America (3 cr.) Assesses the complexities of the academic study of the Indigenous peoples of North America, emphasizing the diversity of Native cultures, representations of them by the public and by scholars, and examining cultural adaptations from Pre-Contact to Contemporary.

E606 Research Methods in Cultural Anthropology (3 cr.) This course provides an introduction to the use of ethnographic field work methods, including participant-observation, semi-structured interviewing, and use of mapping, among others. Every year this course will focus on a community-based research project.

P501 Community Archaeology (3 cr.) Community archaeology implies direct collaboration between a community and archaeologists. Collaboration implies substantial adjustment in archaeological methods and epistemologies incorporating community members in

setting research agendas, working on excavations, and interpreting results. This course examines a wide range of issues and looks at both successful and unsuccessful projects to arrive at an assessment of best practices.

Capstone:

For completion of the M.A., students are required to complete either an internship, which involves writing a report for the organization or agency, or completing a more traditional M.A. thesis. A third option, consisting of writing an article eligible for publication in a peer-reviewed journal, can also be completed in partial fulfillment of the requirements for the M.A. degree.

Internship Option (6 cr.) A student will be placed with a non-governmental organization, a city or county agency, a museum or other Cultural Resource Management organization, or a community-based organization and will arrange with the sponsoring organization to complete a project that will be mutually agreed upon by the Graduate Committee of the Anthropology Department and the organization. Note: The internship may be taken for variable credits depending on the amount of contact hours with the equivalence of 50 hours per credit hour unless constructed as a graduate assistantship in accordance with Anthropology department policy in which case the contact hours may be greater.

Thesis Option (6 cr.) A student would develop and write a thesis supervised by a three-member committee of full-time faculty. In most cases, the thesis would explore a research question related to some aspect of the urban setting of greater Indianapolis and Central Indiana, and would demonstrate the ability of a student to work independently on that topic, and to apply both theoretical insight and methodological skills to a substantive issue. A student would be required to successfully defend the thesis before his/her committee.

Evidence of Publishable and Professional Research Option (6 cr.) Rather than producing a traditional M.A. thesis, in accordance with the student's advisor, students will be allowed to write a research paper that is assessed to be publishable in a refereed journal. Alternatively, for students primarily interested in a focus on Museums or in Cultural Resource Management, the advisor might suggest that the student develop and produce a public exhibit in Indianapolis or Central Indiana. Lastly, students may be permitted to produce a report that contributed significantly to a policy issue in Indianapolis or Central Indiana. Student articles may be submitted for publication to a variety of peer-reviewed journals and scientific merit will also be assessed by the Graduate Committee.

Other Courses:

For a complete description and list of other graduate courses, consult the departmental webpage.

Graduate Minor

The graduate minor in Anthropology and Health is an integrated field of 12 credit hours of study designed to supplement the graduate training of students with an interest in careers in the health field. The program has three goals: to provide students with a holistic perspective on the anthropology of health, which integrates human biology, ecology, and culture in a systems model of health; to develop students' anthropological inquiry skills in understanding health in human groups; and to develop students' abilities to apply anthropological concepts and skills to health interventions in the areas of their career focus. The graduate minor in anthropology and health will provide students with training that will add greater depth and breadth to their qualifications in their major field. They will be able to use the cross-cultural and biocultural perspectives of anthropology to supplement their primary graduate training to better prepare them for a career in the health fields. This focused training will enable students to use anthropological concepts and skills to identify biocultural factors in the occurrence of disease, to understand ethnic behavior related to illness, and to identify where health programs across social and ethnic lines can be made more effective.

Course Requirements

Twelve hours of credit approved for the minor in anthropology and health with a grade point average of at least 3.25, including E445; A594; one course selected from B521, B523, B525, E404, E606, and L605; and one elective.

Courses

A594 Independent Learning in Applied Anthropology (3 cr.) P: Authorization of instructor. Independent research/training using anthropological perspectives/ methods in addressing social issues. The project must be a discrete activity with a concrete product, conducted in conjunction with the student's anthropology advisor and the member of the organization where he or she will be located. (May be repeated for no more than 6 credit hours total.)

E445 Medical Anthropology (3 cr.) A cross-cultural examination of human biocultural adaptation in health and disease, including biocultural epidemiology; ethnomedical systems in the presentation, diagnosis, and treatment of disease; and sociocultural change and health.

Research Methods in the Anthropology of Health

B521 Bioanthropology Research Methods (3 cr.)
B523 Anthropometry (3 cr.)
B525 Genetic Methods in Anthropology (3 cr.)
E404 Field Methods in Ethnography (3 cr.)
E606 Research Methods in Cultural Anthropology (3 cr.)
L605 Field Methods in Anthropological Linguistics (3 cr.)

Electives

Electives in the anthropology of health (3 cr.). Electives will be selected from approved anthropology courses offered at Indianapolis and Bloomington, in consultation with the minor advisor.

Faculty

Director

Susan Hyatt, Anthropology, Cavanaugh Hall 413, (317) 274-8207

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

W. Kenneth Barger* (Emeritus), David Burr* (Anatomy), Della Collins Cook*, Richard Gunderman* (Philosophy, Radiology), Barbara D. Jackson (Emerita), Paul Jamison* (Emeritus), Robert Meier* (Emeritus), Paul R. Mullins*, Susan B. Sutton*, Richard E. Ward*

Associate Professors

Jeanette Dickerson-Putman*, Gina (Sanchez) Gibau, Susan Hyatt, Elizabeth B. Kryder-Reid

Courses

Courses Relevant to the MA in Applied Anthropology

ANTH–A 560 Graduate Topics in Anthropology (3 cr.) P: May be repeated for up to 9 credits. This seminar course provides a conceptual examination of selected topics in the field of anthropology.

ANTH–A 565 Anthropological Thought (3 cr.) This course traces the development of anthropological theory from the early 20th century up to the present. Students will examine what is distinctive about an anthropological perspective and will analyze how anthropological ideas have shifted over the last century in accordance with the emergence of new social and political imperatives.

ANTH–E 501 Fundamentals of Applied Anthropology (3 cr.) This is a graduate-level introduction to the history and underlying principles of Applied Anthropology. We will examine how understanding a specifically anthropological perspective can provide new insights into the workings of contemporary social policies and programs.

ANTH–E 507 Popular Culture (3 cr.) This course studies how traditional anthropological insight can analyze social and political complexities of contemporary popular cultural phenomena. Focuses on how anthropological subjects such as class, racism, and regionalism lurk within popular cultural phenomena including post-1950 music subcultures, civil religion, and consumer culture.

ANTH–E 509 Modern Material Culture (3 cr.) This course examines how contemporary social experience is impacted by material culture ranging from toys to theme parks. Focuses on how consumers perceive themselves and others in modern consumer culture through the medium of commodities and examines systems of inequality that are reproduced and subverted through consumption.

ANTH–E 521 Indians of North America (3 cr.) Assesses the complexities of the academic study of the Indigenous peoples of North America, emphasizing the diversity of Native cultures, representations of them by the public and by scholars, and examining cultural adaptations from Pre-Contact to Contemporary.

ANTH–E 606 Research Methods in Cultural Anthropology (3 cr.) This course provides an introduction to the use of ethnographic field work methods, including participant-observation, semi-structured interviewing, and use of mapping, among others. Every year this course will focus on a community-based research project.

ANTH–P 501 Community Archaeology (3 cr.) Community archaeology implies direct collaboration between a community and archaeologists. Collaboration implies substantial adjustment in archaeological methods and epistemologies incorporating community members in setting research agendas, working on excavations, and interpreting results. This course examines a wide range of issues and looks at both successful and unsuccessful projects to arrive at an assessment of best practices.

Courses Relevant to the Graduate Minor in Anthropology and Health

ANTH–A 594 Independent Learning in Applied Anthropology (3 cr.) P: Authorization of instructor. Independent research/training using anthropological perspectives/methods in addressing social issues. The project must be a discrete activity with a concrete product, conducted in conjunction with the student's anthropology advisor and the member of the organization where he or she will be located.

ANTH–E 445 Medical Anthropology (3 cr.) A cross-cultural examination of human biocultural adaptation in health and disease, including biocultural epidemiology; ethnomedical systems in the presentation, diagnosis, and treatment of disease; and sociocultural change and health.

Research Methods in the Anthropology of Health

ANTH–B 521 Bioanthropology Research Methods (3 cr.)

ANTH–B 523 Anthropometry (3 cr.)

ANTH–B 525 Genetic Methods in Anthropology (3 cr.)

ANTH–E 404 Field Methods in Ethnography (3 cr.)

ANTH–E 606 Research Methods in Cultural Anthropology (3 cr.)

ANTH–L 605 Field Methods in Anthropological Linguistics (3 cr.)

Applied Communication

School of Liberal Arts

Departmental E-mail: commdept@iupui.edu

Departmental URL: http://www.liberalarts.iupui.edu/comm/

Curriculum

Degrees Offered

M.A. in Applied Communication

The Department of Communication Studies offers a master's program in Applied Communication with concentrations in corporate communication, health communication, media studies and public communication.

Program Goal

The overarching goal of this unique program in Applied Communication is to provide students with the competencies and skills necessary to address specific communication issues and problems that are socially relevant and to suggest or implement change. The primary intellectual goal of the program is to increase our students' understanding of the theoretical implications of discipline-specific knowledge and to enhance their ability to understand and predict human interaction relative to realistic, applied outcomes associated with contemporary social problems. A practical goal of the program is to educate professionals who grasp the complexities of

communication problems and who are able to develop and execute strategies and create programs to address such issues.

Admission Requirements

Our Department prides itself on the diversity of majors from which students enter our program of study. Prior to entering our master's program, students should have (1) a baccalaureate degree from an accredited institution, (2) an introduction to research methods, (3) experience in the analysis of communication phenomena, and (4) experience with writing in an academic context. Students who do not have this preparatory work may be admitted provisionally with additional coursework required prior to admission, and/or additional credit hour requirements imposed as a part of the minimum requirements for the Master of Arts degree.

The Admissions Committee will evaluate an applicant's preparation and goals to ensure that the applicant meets the requirements of Indiana University Graduate School and that the applicant's needs and goals are compatible with the Department's program. The Department seeks applicants who have strong analytical and writing skills, a strong liberal arts background, an interest in communication, and applicable work-related experiences. Generally, successful applicants will have cumulative grade point averages of 3.0 or higher at the undergraduate level. The Admissions Committee considers all indicators of the applicant's ability to complete the degree successfully.

Applicants should submit the following:

1. Completed application form for Indiana University Graduate School.
2. Personal Statement.
3. Official transcripts of all college level coursework.
4. Three letters of recommendation (from university instructors and/or professional associates) sent directly to the Director of Graduate Studies.
5. *GRE scores are not required for admission to the program; however GRE scores may be submitted if an applicant feels the scores will enhance his/her application and an applicant wishing to be considered for scholarships or fellowship support should note that strong scores on the GRE General Test ARE REQUIRED and may have a positive impact on his/her application.
6. International students must submit TOEFL scores. Information about TOEFL can be obtained from the International Affairs Office, 620 Union Drive, Room 207, Indianapolis, IN 46202-5167 or 317- 274-7000.

The following deadlines must be observed in order to receive consideration for admission:

- January 15—priority consideration for fall semester and to be considered for University Fellowships and other financial support
- April 1—Fall regular admission and summer deadline

Foreign Language Requirements

None, but M.A. students continuing on for the Ph.D. are encouraged to validate their reading proficiency in a foreign language according to University Graduate School standards.

Grades

Students must earn a "C" (2.0 on a 4.0 scale) or better for any course to count toward the M.A. degree. The student must maintain a cumulative GPA of 3.3 (B+) or better in order to graduate.

If a student drops below a cumulative GPA of 3.3 in a given semester, the student may be placed on probation. If the student drops below a cumulative 3.3 for two consecutive semesters, the student may be dismissed from the program.

Course Requirements

In order to graduate, all students must complete the following courses: 1) twelve (12) credit hours of core requirements (C500, C501, C502, C530, C531; C503 or C597), 2) eighteen (18) credits of communication electives, and 3) six (6) additional electives that may be inside or, with advisor's approval, outside of the Department of Communication Studies.

Examinations

The candidate must pass written examinations as a requirement for completion of the degree. The examination procedures will be administered by the student's primary committee.

Applied Learning Project or Thesis

The candidate must satisfactorily complete the Applied Learning Project (ALP) or thesis as a requirement for completion of the degree.

Faculty

Chairperson

Associate Professor Kim White-Mills*

Director of Graduate Studies

Catherine A. Dobris, Department of Communication Studies, Cavanaugh Hall 307G, IUPUI, (317) 278-3110, cdobris@iupui.edu

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Linda G. Bell, John Parrish-Sprowl*, Sandra Petronio

Associate Professors

Catherine A. Dobris, Elizabeth Goering*, Kristine Karnick, Gail G. Whitchurch*, Kim White-Mills*, Nancy Rhodes, Kristy Sheeler

Assistant Clinical Professor

Stuart M. Schrader (Dentistry)

Courses

COMM–C 500 Advanced Communication Theory (3 cr.) Students explore how scholars from various traditions have described and explained the universal human

experience of communication. Students develop an understanding of a variety of communication theories to more completely interpret events in more flexible, useful, and discriminating ways.

COMM–C 501 Applied Quantitative Research Methods in Communication Studies (3 cr.) The course is designed to offer an opportunity to examine, assess, and conduct quantitative research that employs communication theory and quantitative research methods as a means to test theory in applied settings and/or as a means to applied ends (i.e., problem-solving policy analysis).

COMM–C 502 Applied Qualitative Research Methods in Communication Studies (3 cr.) P: 6 credits (at any level) of coursework in Communication Studies. Inductive (data-to-theory) approach to knowledge, and associated sequential and non-sequential methods for studying communication in applied everyday situations, e.g., friendships and other close personal dyads, families, small groups, organizations, and public, media, historical, computer mediated, or health-related contexts.

COMM–C 503 Applied Learning Project (3 cr.) An applied learning project that provides students with a culminating educational experience. The project gives students the opportunity to apply their knowledge of communicative processes to real-life organizational problems, and provides the opportunity to produce a body of work reflecting their abilities.

COMM–C 510 Health Provider-Consumer Communication (3 cr.) Designed to teach communication skills and practices related to health care talk by examining transactional communication within health care contexts. Topics covered in this course focus directly upon interpersonal dialogue between health care providers and patients.

COMM–C 520 Advanced Public Communication (3 cr.) Critical analysis and employment of rhetorical strategies in forms and types of professional discourses incorporating current technologies.

COMM–C 526 Effective Media Strategies (3 cr.) Contemporary communicators in need of mediums of communication in addition to face-to-face interaction require an expanded knowledge of rhetorical strategies. This course will have a special focus on the effective use of media as a means of persuasion.

COMM–C 528 Group Communication and Organizations (3 cr.) This seminar-format course examines the ways in which informal groups and communication networks facilitate a variety of organizational processes (i.e., socialization, diffusion of innovation). Emphasis is placed on developing theoretical understanding of informal groups in organizations as well as on methodological issues involved in studying communication networks in organizations.

COMM–C 530 Communication Criticism (3 cr.) This course will introduce students to criticism as a method of studying persuasive messages in speeches, fiction, mass media, musical lyrics, political campaign literature, art, and other modes of communication in contemporary culture.

COMM–C 531 Media Theory and Criticism (3 cr.) A course organized primarily around theories and critical strategies commonly considered within the broad category of contemporary criticism. The course utilizes primary theoretical texts to introduce students to a variety of methodologies employed in analyzing media messages, and emphasizes the application of theoretical frameworks on the analysis of specific media texts.

COMM–C 544 Advanced Relational Communication (3 cr.) Applications of communication theory/research in such areas as relational culture and relationship development. Includes a scholarly project on a real relationship, and applications of research to areas such as pedagogy and couple/family therapy.

COMM–C 580 Advanced Organizational Communication (3 cr.) The course provides a solid foundation of concepts for understanding and discussing human organizations. Students will analyze, evaluate, and apply the theories and practices related to organizational issues. Through case studies, readings, and practical applications, this course combines a theory-based understanding of communication in organizations with real-world applications.

COMM–C 582 Advanced Intercultural Communication (3 cr.) An in-depth analysis of how variables such as values, beliefs, traditions, language, background, and experiences are manifested in the verbal and nonverbal meaning of messages communicated by cultures and subcultures throughout our global society.

COMM–C 591 Topics/Seminar in Applied Communication (3 cr.) This is a revolving topics course. The changing nature of the topic allows graduate students to explore, synthesize, and integrate knowledge of the field of communication and the particular discipline of applied communication while focusing on a single topic not otherwise addressed in the course of study.

COMM–C 592 Advanced Family Communication (3 cr.) Applications of theory and research on the role of communication in creating and maintaining marriages/committed couples and families. Includes a scholarly term paper on a real couple or family's communication.

COMM–C 593 Advanced Health Communication (3 cr.) A course designed to teach communication skills and practices related to health care by examining health care communication theory. Topics range across communication levels (interpersonal, intrapersonal, group, organization, mass media, and mediated communication) within a variety of health care contexts.

COMM–C 594 Communication and Conflict Management in Organizations (3 cr.) This seminar-format course examines the communication exchanges that facilitate conflict management within organizational contexts. Specific attention is focused on negotiation and mediation; however, the communication of alternative means of conflict and dispute resolution are also discussed. In addition, students will be introduced to methods for assessing conflict interaction in organizations.

COMM–C 597 Thesis (3 cr.) Applied communication students who choose the thesis option will identify a research topic and develop it under the guidance of the student's thesis director (IUPUI professor). The thesis topic will be related to the field of applied communication in its foci and method.

COMM–C 598 Internship (1–3 cr.) This course integrates applied communication theory and practice in a practice setting. Students will apply theoretical concepts and research tools, conduct projects, and interact with communication professionals in the designated setting. In concert with the student's chosen area of concentration, he or she will address issues of importance to that particular organization.

COMM–C 599 Independent Study (1–6 cr.) This course provides students with the opportunity to synthesize and apply knowledge acquired through course work and professional experience into a completed research project in applied communication. Students will work independently on a topic/issue of choice under the guidance of graduate faculty.

COMM–C 620 Computer-Mediated Communication (3 cr.) An overview of practical and scholarly approaches to computer mediated communication. The readings address mass communication, discourse, community, gender, intercultural understanding, ethics, interpersonal relationships, identity, organizational communication, and education.

Applied Statistics

School of Science

Contact Information

Department of Mathematical Sciences, LD 270, IUPUI, (317) 274-6918

Program Email: grad-program@math.iupui.edu

Program URL: http://www.math.iupui.edu/program/phd/biostat

Curriculum

Ph.D. Minor in Applied Statistics

The Department of Mathematical Sciences in the School of Science at IUPUI offers a master's degree program in mathematical sciences with a specialization in applied statistics. Accordingly, some doctoral students in the Department of Basic Medical Science in the School of Medicine or other programs may find it useful to have a minor in applied statistics as an additional option in their program of study.

Course Requirements

Twelve credit hours in courses approved for the minor in applied statistics, including STAT 51100, STAT 51200, and six additional credit hours chosen in consultation with the minor representative. For students in medical and molecular genetics, a common option would be to take two of the courses from 52300, 52400, 52500 and 53300. Statistical Quality Control (51300) might be a desirable elective for students in pharmacology and toxicology. Students who have successfully completed GRAD G651 Introduction to Biostatistics I and GRAD G652 Introduction to Biostatistics II in the School of Medicine will be exempted from STAT 51100.

Examinations

The exact requirements for the minor and the examination procedure prior to admittance to candidacy are determined by the student's minor representative on his or her advisory committee from the Department of Mathematical Sciences.

Faculty

Curriculum Courses Faculty

Director

Professor Benzion Boukai*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Benzion Boukai*

Associate Professors

Hanxiang Peng*, Jyotirmoy Sarkar*

Assistant Professors

Samiran Ghosh, Fang Li, Ryan Martin

Courses

Curriculum Courses Faculty

Core Courses

STAT 51100 Statistical Methods (3 cr.)

STAT 51200 Applied Regression Analysis (3 cr.)

Other Courses

STAT 51300 Statistical Quality Control (3 cr.)

STAT 51400 Design of Experiments (3 cr.)

STAT 51500 Statistical Consulting Problems (3 cr.)

STAT 51900 Introduction to Probability (3 cr.)

STAT 52000 Time Series and Applications (3 cr.)

STAT 52100 Statistical Computing (3 cr.)

STAT 52200 Sampling and Survey Techniques (3 cr.)

STAT 52300 Categorical Data Analysis (3 cr.)

STAT 52400 Applied Multivariate Analysis (3 cr.)

STAT 52500 Generalized Linear Model (3 cr.)

STAT 52800 Mathematical Statistics I (3 cr.)

STAT 52900 Bayesian Statistics and Applied Decision Theory (3 cr.)

STAT 53200 Elements of Stochastic Processes (3 cr.)

STAT 53300 Introduction to Survival Analysis (3 cr.)

STAT 53600 Nonparametric Statistics (3 cr.)

Biochemistry and Molecular Biology

School of Medicine

Departmental E-mail: biochem@iupui.edu

Departmental URL: http://www.biochemistry.iu.edu

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy; Ph.D. Minor in Diabetes and Obesity, Certificate in Biotechnology

Special Departmental Requirements

(See also general University Graduate School requirements and departmental brochure.)

Admission Requirements

Typically, a baccalaureate degree in biology, chemistry, or physics that includes calculus and organic chemistry is required for admission. The General Test of the Graduate Record Examination is required.

Master of Science in Biochemistry and Molecular Biology with Biotechnology Track

Admission Requirements

Students must complete the Biotechnology Certificate with a GPA of 3.0 or better before applying to the M.S. program. The GRE is not required for admission to the M.S. degree program.

Course Requirements

The 30-credit curriculum for the M.S. program includes the 17 credits for the Biotechnology Certificate, plus one elective graduate course in Basic Sciences (3 credits), 9 credits of research with a faculty mentor, and a 1-credit tutorial in scientific writing and communication. A research thesis is required.

Master of Science in Biochemistry and Molecular Biology

The department encourages most students to enroll in either the M.S. with Biotechnology track or the Ph.D. A minimum of 30 credit hours, including the core curriculum courses G715, G716, G655, G505; plus two of the six 2-credit Biochemistry core courses (G805, G807, G817, G848, G852, G825); and at least 9 credit hours in research. A thesis will be written and successfully defended to the thesis committee.

Final Examination

Oral, covering thesis and course work.

Doctor of Philosophy in Biochemistry and Molecular Biology

Students are admitted through the IBMG (Indiana University School of Medicine BioMedical Gateway) open enrollment program and will take a common curriculum in the first semester. They will commit to the Biochemistry and Molecular Biology program after the second semester.

CURRICULUM FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY Ph.D. PROGRAM

Year 1

Fall

- G715 Biomedical Science I—Biochemical Basis of Biological Processes (3 cr.)
- G716 Biomedical Science II—Molecular Biology and Genetics (3 cr.)
- G717 Biomedical Science III—Cellular Basis of Systems Biology (3 cr.)
- G718 Research in Biomedical Science (1st lab rotation) (2 cr.)

Spring

- G655 Research Communication Seminar (1 cr.)
- G718 Research in Biomedical Science Rotations 2 and 3 (4 cr.)

Students will take 6 credits from the IBMG open enrollment electives in Spring.

Students must take at least two of the six 2-credit Biochemistry “core” courses (G805, 807, 817, 848, 852, 825) shown below (offered among the Spring IBMG electives or offered in Fall 2). These may also be taken in later years.

- G817 Molecular Basis of Cell Structure and Function (2 cr.)
- G852 Concepts of Cancer Biology: Signaling Gone Awry (2 cr.)
- G807 Structural and Chemical Biology (2 cr.)
- G848 Bioinformatics, Genomics, Proteomics and Systems Biology (2 cr.)

Year 2

Fall

- G805 Diabetes and Obesity (2 cr.)
- G825 Advanced Topics in Molecular Biology (2 cr.)
- G505 Responsible Conduct of Research (1 cr.)
- G855 Experimental Design and Research Biostatistics (1 cr.)

Spring

- B803 Advanced Biochemistry (1 cr.)

This course in grant writing will culminate in the submission and oral defense of an “NIH or NSF style” grant proposal on the students intended research topic. The assigned grade for this course is dependent on the successful defense of the proposal that will serve as a qualifying exam and be required for Advancement to Candidacy.

Years 2-5

- Seminar B890 (2 cr./year)
- Total credits 33
- B855 Research Project: a minimum of 45 credit hours

Work in the field of the candidate’s thesis. Emphasis on ability to pursue research with relative independence and responsibility.

Notes:

- Students will be questioned on topics outside of their thesis work during their thesis proposal oral defense in B803. Passing of this defense (with B/3.0 grade or better) will be required for advancement to candidacy.
- Students will be enrolled for credit in B890 in years 2–5 in which they will present a seminar each year as well as attend all student and faculty seminars. Student seminars will generally be of a “journal club” format, where current, published work in the field of biochemistry is presented. Students who have

advanced to candidacy may present their own lab work upon approval of course director and thesis advisor.
- After choosing a laboratory for thesis research, an advisory committee consisting of at least 3 Biochemistry and Molecular Biology and 1 external faculty member will be formed with the approval of the thesis advisor and departmental chairperson. Upon advancement to candidacy a thesis research committee will be similarly formed that may consist of different faculty.
- Students must score at least B– on each course and maintain at least a B average (3.0 minimal GPA).
- M.D./Ph.D. students will not be required to take G715-717 but will be expected to perform lab rotations (G718) during summer breaks from medical school classes. They will take B848 and at least one more of the 2-credit Biochemistry "core" courses (G805, 807, 817, 848, 852, 825) along with other courses required of Biochemistry and Molecular Biology Ph.D. students (G505, G655, G855, B803 and B890) plus 2 credits from other department offerings. In the case of combined M.D./Ph.D. students, the committee may approve substitution of appropriate medical school courses for the electives. The minor representative will be selected from outside the student's major department and must be approved by the diabetes and obesity training program.

Grades

A minimum grade point average of 3.0 (B) must be maintained in all nonresearch course work.

Advancement to Candidacy

B803 Advanced Biochemistry is a course in grant writing which will culminate in the submission and oral defense of an "NIH- or NSF-style" grant proposal on the student's intended research topic.

Students meet once every six months with an advisory committee to review progress in course work. Continuation in the program depends upon satisfactory performance and progress in each phase of the program. The final examination in the series is an oral defense of a written research proposal, which constitutes the written examination.

Dissertation

A minimum of 45 credit hours in research, completed with a grade point average of 3.0 (B) or above. It is expected that the dissertation will qualify for publication in a recognized journal.

Final Examination

Oral, covering dissertation, major, and minor.

Ph.D. Minor in Cancer Biology

The Ph.D. Minor in Cancer Biology is administered by the Department of Microbiology & Immunology. Cancer Biology Training Program (CBTP) faculty are members of the Indiana University Cancer Center, the matrix organization for an extensive range of cancer efforts and activities. Ongoing NIH- and ACS-funded research programs focus on regulation of cell growth, hematopoiesis, experimental therapeutics, adult oncology, and pediatric oncology.

CBTP students will fulfill the requirements of their individual basic science departments and complete the cancer biology minor.

Ph.D. Minor in Diabetes and Obesity

Preceptors with diabetes-related projects are selected from the basic science department graduate programs or interdisciplinary programs. A minimum of 12 credit hours outside of the student's major department including G805 Diabetes and Obesity. At least one credit of G504 Introduction to Research Ethics must also be taken. Other courses are selected from the following list:

- B800 Medical Biochemistry (3 cr.)
- B810 Cellular Biochemistry and Regulation (3 cr.)
- C603 General Pathology (6 cr.)
- F598 Drugs, Diseases, and Poisons (3 cr.)
- F804 Introduction to Pharmacology and Toxicology I (3 cr.)
- F809 Neuropharmacology (3 cr.)
- F810 Pharmacology of Autonomic Cardiovascular Control (3 cr.)
- F814 Introduction to Pharmacology and Toxicology II (3 cr.)
- G706 Cell-Cell Communication (3 cr.)
- G804 Cellular and Molecular Biology (3 cr.)
- G807 Structural and Chemical Biology (2 cr.)
- G817 Molecular Basis of Cell Structure and Function (2 cr.)
- G818 Cellular and Integrative Physiology (3 cr.)
- G865 Fundamental Molecular Biology (3 cr.)
- G910 Advanced Molecular Biology Methods (3 cr.)
- J805 Molecular Immunology (3 cr.)
- J807 Seminar in Immunology (2 cr.)
- J840 Mechanisms of Immune Regulation (3 cr.)
- L564 Molecular Genetics of Development (3 cr.)
- Q580 Basic Human Genetics (3 cr.)

More information is available on the Diabetes and Obesity Research Training Program at the Center for Diabetes Research website: http://biochemistry.iu.edu/resources/center-for-diabetes-reserch/diabetes-and-obesity-research-training-program/

Certificate in Biotechnology

Admission Requirements

A baccalaureate degree in a scientific field with a minimum science GPA of 3.0/4.0. Proficiency in English is required, and must be demonstrated either by obtaining a degree from a certified U.S. university or a minimum score of 550 on the TOEFL.

Specific Requirements

A fixed curriculum of 17 credits. This will include one introductory course in biochemistry, such as B500 Introductory Biochemistry. This course should be completed before enrolling in the laboratory courses. If a student has taken a recent biochemistry survey course, the student must substitute an advanced graduate lecture course that is relevant to biotechnology. Such courses may include G807 Structural and Chemical Biology, G817 Molecular Basis of Cell Structure and Function, K540 Topics in Biotechnology, or C636 Biochemistry Structural Aspects.

Students may take the remaining courses in any order. Three laboratory courses in biotechnology: G841 Methods in Proteomics (3 credits), G890 Methods in Molecular Biology and Pathology (3 credits), G823 Methods Cell Biology (3 credits). An ethics course, G505 Responsible Conduct in Research (1 credit), is required, as well as two semesters of a problem-based learning course in biotechnology, G828 Concepts in Biotechnology (2 credits).

Students will be required to have an overall GPA of 3.0 or higher and a minimum grade of B– in each of the required courses for the certificate, except for the B500 Introductory Biochemistry, which may be completed with a C+. Students who receive a grade of C in B500 will be required to do additional work in an advanced biochemistry tutorial course (e.g., B803) to bring them up to an acceptable level in basic biochemistry and biotechnology.

Advisory Committee

The program and student advisory committee will include the program director, directors of the core courses, laboratory director for the program, and one or more representatives from a biotechnology-related company.

Competency Requirements

In the laboratory and problem-based learning courses, students will be required to demonstrate basic competencies necessary for success as a researcher in industry or academia. These competencies include general skills in communication, problem-solving, and lifelong learning, as well as specific biotechnology skills in good laboratory conduct, laboratory units of measure, computational and statistical analysis, and biotechnology instrumentation.

Faculty

Chairman

Professor Zhong-Yin Zhang*, Robert A. Harris Chair of Biochemistry and Molecular Biology

Graduate Advisor

Professor Mark Goebl*

Director of Biotechnology Certificate Program

Sonal P. Sanghani

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Primary Biochemistry Faculty

Zhong-Yin Zhang*, Robert A. Harris Chair of Biochemistry and Molecular Biology

Distinguished Professor

Howard Edenberg*, Peter J. Roach*

Chancellor's Professors

Howard Edenberg*, Thomas D. Hurley*, Peter Roach*

Daniel and Lori Efroymson Professor of Oncology

Hua Lu*

Professors

Anna A. DePaoli-Roach*, Keith Dunker*, Mark G. Goebl*, Maureen A. Harrington*, Lawrence A. Quilliam*, Suk-Hee Lee*, Ronald C. Wek*, Zhong-Yin Zhang*

Associate Professors

Millie M. Georgiadis*, Qi-Zhuang Ye*

Assistant Professors

Charlie (Xiaocheng) Dong*, Quyen Hoang*, Andy Hudmon*, Hyun-Suk Lim*, Samy Meroueh*, Yuro Takagi*, Mu Wang*, Clark Wells*

Primary Emeritus Faculty

William Bosron*, David M. Gibson*, Jean Hamilton-Steinrauf*, Robert Harris*, Edwin Harper*

Associate Research Professor

Xiaoling Xuei

Assistant Research Professor

Sonal Sanghani

Secondary Biochemistry Faculty

Professors

W. Marshall Anderson* (IUSM—Gary), Simon Atkinson* (Nephrology), Martin Bard* (Biology), Simon Conway*, David Crabb* (Medicine), Rose Fife* (Dean's Office), Larry Jones* (Medicine), Mark Kelley* (Pediatrics), Michael W. King* (IUSM—Terre Haute), William McBride Jr.* (Psychiatry), Harikrishna Nakshatri* (Surgery), Simon Rhodes* (Physiology), Jay Simon* (Psychiatry), David Skalnik* (Pediatrics), Debbie Thurmond* (Pediatrics), John Turchi* (Hematology/Oncology), Claire Walczak* (IUSM-Bloomington), David Wilkes* (Pulmonary Medicine), Frank Witzmann* (Physiology), Mervin Yoder Jr.* (Pediatrics), Yaoqi Zhou* (Informatics)

Associate Professors

David Daleke* (IUSM—Bloomington), Kenneth W. Dunn* (Nephrology),Joseph Dynlacht* (Radiation Oncology), Jeffrey S. Elmendorf (Physiology), Dipika Gupta (IUSM - Gary), David Ingram* (Pediatrics), Reuben Kapur* (Pediatrics), Daniela Matei* (Surgery), Ed McKee* (IUSM—South Bend), Irina Petrache (Pulmonary Medicine), Stephen Randall* (Biology), Kent Redman (IUSM—Fort Wayne), C. Max Schmidt* (Surgery), Weinian Shou* (Pediatrics), James P. Walsh* (Medicine)

Assistant Professors

Tracy Anthony (IUSM—Evansville), Kristin Chun* (Pediatrics), Lindsey Mayo (Pediatrics), Manjari Mazumdar (IUSM - Bloomington), Nuria Morral* (Medical Genetics), Julie Peller (IUSM - Northwest), G. Seetharamaiah (IUSM—Evansville)

Associate Research Professor

Mark Wagner (Nephrology)

Assistant Scientist

Dan Spandau (Dermatology)

Associate Emeritus Faculty

Walter Balcavage* (IUSM—Terre Haute), Shao-Ling Fong* (Ophthalmology), T-K Li* (Medicine)

Courses

BIOC–B 500 Introductory Biochemistry (3 cr.) P: C341 or equivalent. Structures of carbohydrates, proteins, lipids, and nucleic acids. Basic principles of enzyme catalysis, protein synthesis, intermediary metabolism, and nutrition.

BIOC–B 800 Medical Biochemistry (3 cr.) P: One semester of organic chemistry. Structure and function of biological molecules, regulation of cellular processes by nutrients and hormones, biochemical and molecular basis of disease.

BIOC–B 803 Advanced Biochemistry (arr–3 cr.) Tutorial instruction in biochemistry.

BIOC–B 805 Diabetes and Obesity (3 cr.) P: One semester of biochemistry. Biochemistry, cell biology, molecular biology, genetics, immunology, and pathophysiology of diabetes and obesity. Topics include metabolic regulation, signal transduction, insulin resistance, insulin production, beta-cell function, animal models, complications, nutrition, prevention, and therapy.

BIOC–B 807 Protein Structure and Function (3 cr.) P: Two semesters of organic chemistry; one semester of biochemistry. Physical forces stabilizing protein structure; protein folding. Essential features of macromolecular interactions. Introduction to enzyme kinetics and chemical mechanism in enzyme reactions.

BIOC–B 808 Physical Biochemistry (3 cr.) P: Two semesters of physical chemistry; two semesters of calculus; one semester of biochemistry. Thermodynamics and biophysical chemistry of protein, enzymes, nucleic acids, and membranes.

BIOC–B 809 Advanced Organic Chemistry (1–3 cr.) P: Two semesters of organic chemistry; two semesters of physical chemistry; B807 or consent of instructor. Tutorial instruction in organic chemistry, as applied to biochemistry.

BIOC–B 810 Cellular Biochemistry and Regulation (3 cr.) P: Two semesters of organic chemistry; one semester of biochemistry. Mechanisms of signal transduction and the control of cellular function by hormones, growth factors, and other extracellular regulators.

BIOC–B 811 Advanced Intermediary Metabolism (1–3 cr.) P: B810. Tutorial instruction in specialized areas of metabolism.

BIOC–B 814 Advanced Enzymology (1–3 cr.) P: B807 or B810. Tutorial instruction in enzyme isolation and kinetics.

BIOC–B 821 Scientific Writing and Communication in Biotechnology (1 cr.) P: B807 or B810. Discussion and individual instruction in the preparation of a research proposal and thesis in the biotechnology track of the M.S. in Biochemistry and Molecular Biology.

BIOC–B 822 Research in Biotechnology (1–5 cr.) Research for biotechnology track in M.S. thesis.

BIOC–B 835 Neurochemistry (3 cr.) P: Two semesters of organic chemistry; one semester of biochemistry, or consent of instructor. Metabolism of nervous system tissue. Neurochemical techniques.

BIOC–B 836 Advanced Topics in Neurochemistry (2 cr.) P: B835 or equivalent. Selected topics in neurochemistry dealing with specialized functions of the nervous system.

BIOC–B 842 Instrumentation and Methods of Analysis II (3 cr.) P: Two semesters of organic chemistry; one semester of biochemistry.

BIOC–B 854 Introduction to Research (1 cr.) P: Two semesters of organic chemistry; two semesters of physical chemistry, one semester of biochemistry, or consent of instructors. Tutorial and laboratory instruction in biochemistry. Purpose is to introduce students in biochemistry to three different research programs.

BIOC–B 855 Research (arr cr.)

BIOC–B 868 Advanced Molecular Biology (1–3 cr.) P: G865 or equivalent. Tutorial instruction in specialized area of molecular biology.

BIOC–B 890 Seminar (1 cr.)

BIOC–G 749 Introduction to Structural Biology (1 cr.) An introduction to structural biology including the fundamentals of macromolecular structure and interactions, methods used to determine three-dimensional structures, the relationship between protein sequence and structure, and prediction and analysis of macromolecular structure.

BIOC–G 804 Cellular and Molecular Biology (3 cr.) P: One semester of organic chemistry. Cellular and molecular biology that emphasizes the structural organization, biochemistry, and molecular biology of cells. Includes cellular processes, development, and differentiation and their relationship to medicine.

BIOC–G 805 Diabetes and Obesity (2 cr.) P: One semester of biochemistry. Biochemistry, cell biology, molecular biology, genetics, immunology, and pathophysiology of diabetes and obesity. Topics include metabolic regulation, signal transduction, insulin resistance, insulin production, beta-cell function, animal models, complications, nutrition, prevention, and therapy.

BIOC–G 807 Structural and Chemical Biology (2 cr.) Fundamentals of structural and chemical biology focused on state-of-the-art approaches to inhibitor discovery, use of inhibitors in elucidating biological function, and computational and structural approaches to rational inhibitor design.

BIOC–G 817 Molecular Basis of Cell Structure and Function (2 cr.) Organization and function of subcellular structures. Intracellular coordination of cell activities, including protein and RNA processing/trafficking/quality control, chromatin dynamics, and cell division.

BIOC–G 823 Methods in Cell Biology (3 cr.) P: B500 or equivalent. Discussion and laboratory instruction in modern methods for cell culture, microscopy, flow cytometry, and the use of cell culture to study cellular metabolism.

BIOC–G 825 Advanced Topics in Molecular Biology (2 cr.) The course will highlight selected topics adjusted each year to reflect the most current advancements in molecular biology and will include lectures and paper discussions on: chromatin structure and regulation; transcriptional control; RNA structure and processing; RNAi and miRNA; RNA decay; translational control and its integration in gene expression.

BIOC–G 828 Concepts in Biotechnology (3 cr.) P: B500 or equivalent. Case studies exploring topics on the cutting edge of biotechnology and tutorials in biotechnology calculations.

BIOC–G 841 Methods of Proteomics (3 cr.) P: B500 or equivalent. Discussion and laboratory instruction in modern methods for protein purification, analysis of purity, peptide mapping, and amino acid sequencing.

BIOC–G 848 Bioinformatics, Genomics, Proteomics, and Systems Biology (2 cr.) Biology has been transformed by various high-throughput technologies (genomics, proteomics, metabolomics, etc.), which in turn have led to a large number of massive databases and software analysis packages. This course focuses on the "omics" technologies, on the resulting databases, and on the computational tools used to analyze the data.

BIOC–G 852 Concepts of Cancer Biology: Signaling Gone Awry (2 cr.) Fundamentals of cancer biology; the signaling of events that regulate cell growth, survival, and differentiation; how mutation/dysregulation of signaling molecules leads to cancer and might be exploited for treatment.

BIOC–G 865 Fundamental Molecular Biology (3 cr.) P: B800 or equivalent. Principles of molecular structure, function, and biosynthesis; core information regarding prokaryotic and eukaryotic gene continuity and metabolic coordination; introduction to multicellular systems and problems. (Joint program: biochemistry, medical genetics, microbiology.)

BIOC–G 890 Methods in Molecular Biology and Pathology (3 cr.) P: G865 and/or J838, and consent of instructor. Basic principles and techniques in molecular biology and pathology. Particular emphasis will be on molecular techniques that can be used to study problems related to biochemistry and pathology.

BIOC–G 910 Advanced Molecular Biology Methods (3 cr.) P: G865 and/or G890 and consent of instructor. Advanced theory and techniques in molecular biology. The focus of the course will be on techniques related to manipulation of cloned DNA to study their expression, structure, and function.

Biomolecular Imaging and Biophysics

School of Medicine

Departmental E-mail: bioimage@iupui.edu

Departmental URL: http://www.iupui.edu/degrees/122/medical-biophysics-and-biomolecular-imaging/

Curriculum

Degrees Offered

Master of Science in Medical Biophysics and Doctor of Philosophy

Program Information

An interdepartmental committee is responsible for the administration of the medical biophysics degree programs. The committee is composed of representatives from the Departments of Biochemistry and Molecular Biology, Pharmacology and Toxicology, and Physiology and Biophysics from the Indiana University School of Medicine and from the Departments of Biology and Chemistry from the Purdue University School of Science at Indianapolis. Graduate training in the program is oriented primarily toward research at the molecular and cellular level, with focus points at the boundaries of the traditional disciplines of physics, chemistry, and biology. Research programs include membrane biophysics and structure-function relations in cells and macromolecules. Detailed descriptions of faculty research interests are available.

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Bachelor's degree in biochemistry, biology, biophysics, chemistry, mathematics, physics, or an equivalent major. Graduate Record Examination scores on both the General Test and a Subject Test are required as a part of the application.

Master of Science Degree

Course Requirements

At least 30 credit hours, of which 20 credit hours must be in biophysics, including 7 credit hours in research; remaining credit hours in related courses.

Thesis

Optional.

Final Examination

Written or oral or both.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, with a minimum of 36 credit hours in course work (including those for the minor). Required core courses include J611 and J612, B807 Biochemistry or equivalent, one course in quantum mechanics (chosen from Purdue School of Science's P550 Introduction to Quantum Mechanics, P660 Quantum Mechanics I, and C672 Quantum Chemistry), one course in cell infrastructure (chosen from F650, G865, F705, and B807). Additional elective courses totaling at least 9

credit hours are determined by the advisory committee in discussion with the student and selected from a list compiled by the faculty. (See list of courses below.)

Minor

A minimum of 12 credit hours in course work in a departmental minor or an interdepartmental minor in physical science or in cellular and molecular biology.

Qualifying Examination

Written and oral.

Research Proposal

A dissertation research proposal is required.

Final Examination

Oral defense of the dissertation.

Other Provisions

Three research rotations, each a brief project in a preceptor's laboratory, before an advisor is chosen. Presentation of three seminars during graduate study.

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

William Bosron* (Emeritus), Thomas Hurley*, Marvin Kemple*, Eric Long*, Grant Nicol*, Peter Roach*, William Stillwell*

Associate Professors

Barry Muhoberac*, Christoph Naumann, John Schild, Stephen Wassall*

Graduate Advisor

Professor Thomas Hurley*, Medical Science Building 4019, (317) 278-2008

Courses

Relevant Courses

General Courses

BIOP–A 610 Research in Biophysics (arr. cr.)

BIOP–A 611 Seminar in Biophysics (1 cr.)

BIOP–A 612 Special Topics in Biophysics (arr. cr.)

BIOP–A 620 X-Ray Crystallography (3 cr.)

BIOC–B 807 Enzyme Chemistry (3 cr.)

BIOC–B 808 Physical Biochemistry (3 cr.)

BIOC–B 841 Methods of Protein Chemistry (3 cr.)

BIOP–F 616 Molecular Pharmacology (3 cr.)

BIOP–F 650 Membrane Biophysics (3 cr.)

BIOP–F 705 Molecular and Cellular Physiology (3 cr.)

BIOP–F 710 Physiology of Membranes (2 cr.)

BIOP–F 724 Physiology of the Nervous System (3 cr.)

BIOP–F 725 Physiology of Muscle (2 cr.)

BIOP–F 835 Molecular Mechanism of Drug Action (3 cr.)

BIOC–G 651 Introduction to Biostatistics I (3 cr.)

BIOC–G 652 Introduction to Biostatistics II (3 cr.)

BIOC–G 865 Fundamental Molecular Biology (3 cr.)

BIOC–G 890 Methods in Molecular Biology and Pathology (3 cr.)

BIOP–J 611 Introduction to Biophysics I (3 cr.)

BIOP–J 612 Introduction to Biophysics II (3 cr.)

BIOP–J 805 Immunology (3 cr.)

BIOL–Q 612 Molecular and Biochemical Genetics (3 cr.)

Relevant Courses in the Purdue School of Science at Indianapolis

- BIOL 569 Cellular Neurobiology (2 cr.)
- BIOL 570 Biological Membranes (3 cr.)
- BIOL 641 Microbial Genetics (2 cr.)
- CHEM 575 Intermediate Physical Chemistry (3 cr.)
- CHEM 636 Biochemical Mechanisms (3 cr.)
- CHEM 657 Reaction Mechanisms (3 cr.)
- CHEM 672 Quantum Chemistry (3 cr.)
- CHEM 675 Chemical Kinetics (3 cr.)
- CHEM 682 Statistical Thermodynamics (3 cr.)
- CHEM 696 Special Topics in Chemistry (1-3 cr.)
- MATH 526 Principles of Mathematical Modeling (3 cr.)
- MATH 532 Elements of Stochastic Processes (3 cr.)
- PHYS 550 Introduction to Quantum Mechanics (3 cr.)
- PHYS 556 Introductory Nuclear Physics (3 cr.)
- PHYS 600 Methods of Theoretical Physics (3 cr.)
- PHYS 630 Advanced Theory of Electricity and Magnetism (3 cr.)
- PHYS 660 Quantum Mechanics I (3 cr.)

Biostatistics

School of Medicine, Indianapolis, and Purdue School of Science

Contact Information

Department of Mathematical Sciences, LD 270, IUPUI, (317) 274-6918

Program E-mail: grad-program@math.iupui.edu

Program URL: http://www.math.iupui.edu/program/phd/biostat/

Curriculum

Degree Offered

Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

The application deadline for the program is January 15 of each year for the following fall. The program is designed for individuals with strong quantitative and analytical skills and a strong interest in biological, medical and/or health related sciences. A bachelor's degree or equivalent is required. Students seeking admission must apply online. Applications must include a complete application form, three letters of recommendation, official undergraduate transcripts, personal statement, resume or CV, and the Graduate Record Examination (GRE) general test. The TOEFL is also required if the applicant's native language is not English.

Course Requirements

A minimum of 90 credit hours are required for the degree. The 90 credit hours will consist of the following:

Core Courses (33 hours): A common core of 33 credit hours of course work will be required of all students who begin the program after the completion of a bachelor's degree.

- STAT 51200 Applied Regression Analysis
- BIOS S515 Biostatistics Practicum
- STAT 51900 Introduction to Probability +
- STAT 52500 Intermediate Statistical Methods +
- BIOS S527 Introduction to Clinical Trials
- STAT 52800 Mathematical Statistics I +
- STAT 53600 Introduction to Survival Analysis +
- BIOS S546 Applied Longitudinal Data Analysis +

Any three of the following:

- STAT 61900 Probability Theory
- BIOS S621 Advanced Statistical Computing
- STAT 62800 Advanced Statistical Inference
- BIOS S636 Advanced Survival Analysis ^
- BIOS S646 Advanced Longitudinal Data Analysis ^

(+ indicates the program's core courses; ^ indicates course is still subject to approval by The University Graduate School)

Elective Courses (12 hours): All students must take 12 credit hours of elective statistics/biostatistics courses. At least six credit hours of the electives must be taken from 600-level courses. The remaining 45 credit hours will be taken as additional coursework in a minor area (9 to 15 credits), further elective courses, independent studies, and directed dissertation research.

Minor Area (9 to 15 hours): In addition to the 45 credit hours of formal statistics/biostatistics coursework, all students must complete a minor in an area related to any of health and life sciences disciplines. The minor may be obtained in areas such as pharmacology and toxicology, epidemiology, genetics, biology, physiology bioinformatics, public health and health economics, among many others and it must be approved by the student's advisor or graduate committee. The minor must contain a minimum of three graduate level courses (9 cr.) in the chosen area and it must comply with the minor requirements of the respective department/unit.

Dissertation (27 to 33 hours): The remaining hours to total 90 will be guided research dissertation hours. After passing the preliminary examination, the student may officially begin work on the dissertation, which will be original and publishable statistical/biostatistical research originating from and with application to well-defined life and health related problems. The student must submit the completed written dissertation to the research committee for reading and evaluation and subsequently will have to present and defend it orally in a public forum before the committee.

Qualifying Examination

Students must pass an initial qualifying examination on the five core courses: STAT 51900, 52500, 52800, 53600, and BIOS S546. The qualifying examination is a written examination offered once a year during a two-day Qualifier Exam Session the week before classes start in August and is administered in two sections – Theoretical Biostatistics and Applied Biostatistics. The preparation and the administration of the qualifying examination are overseen by the Graduate Examination Committee. Students are expected to have completed and passed both sections of the qualifying examination on or before their qualifier deadline.

Deadline for full-time students:
The deadline for passing the qualifying examination for full-time students who enter the program with a master's degree or equivalent is August at the end of their second year; the deadline for full-time students who enter the program without a master's degree is August at the end of their third year.

Deadline for part-time students:
The deadline for passing the qualifying examination for part-time students who enter the program with a master's degree or equivalent is August at the end of their third year; the deadline for part-time students who enter the program without a master's degree is August at the end of their fourth year.

If students do not pass both sections of the examination by their qualifier deadline, they will have their privilege to continue in the program terminated.

A student will have at most two attempts to pass the examination. The first attempt must include the entire examination, i.e. both the Theoretical and Applied sections. If one or both sections are not passed on the first attempt, then a second attempt on or before the deadline is allowed. During the final attempt, the student may only sit for the section(s) not passed in the first attempt.

A student's first attempt at the qualifying examination will result in one of the following three outcomes:

1. Pass Both Sections: The student has demonstrated fundamental understanding of the core material and the examination committee believes he/she will be successful in completing the Ph.D. program.
2. Pass One Section: The student has demonstrated fundamental understanding of one section, but lacks adequate understanding of the other section. The student must sit for the section not passed at a future examination session.
3. Fail: The student has failed to demonstrate an adequate understanding of the material from the core courses and thus fails the examination.

The student must sit for both sections at a future examination session.

A student's second and final attempt at the qualifying examination will result in one of the following two outcomes:

1. Pass: The student has demonstrated fundamental understanding of the core material and the examination committee believes he/she will be successful in completing the Ph.D. program.
2. Fail: The student has failed to demonstrate an adequate understanding of the material from the core courses and thus fails the examination, with privilege to continue in the program terminated.

Preliminary Examination

A student becomes eligible to take the preliminary examination after passing the qualifying examination. The student must prepare and pass a preliminary examination, which consists of an oral presentation on an advanced research topic suggested by the student to an appointed committee of at least four faculty members, including the student's advisor and at least one member from the student's minor area. The committee may consist of the same members as the student's original advisory committee, but is not required to. This committee will serve as the research committee for the student, and must be approved by the dean. Prior to the examination, the student must provide the committee with a paper (10 – 15 pages) outlining the topic to be covered, clearly indicating the scope and depth of the planned research along with relevant references. In the examination, the student is expected to display an in-depth understanding of the chosen subject matter. The committee may ask the student questions which normally will be directed to the subject matter of the research but may, by natural extension, also cover any other relevant topic.

Admission to Candidacy

Following the passing of the preliminary examination and the completion of all required coursework, the student's advisory committee will nominate the student to candidacy. Upon approval of the Dean of the The University Graduate School, the student will be admitted to candidacy.

Final Examination

Oral, primarily a defense of the dissertation.

Normal Progress and Termination

Once students begin research, they must maintain normal progress toward their degree objective to ensure continued financial support and/or active status. If, in the opinion of the research committee, satisfactory research progress is not being made or if the GPA continues to be below 3.0, a meeting of the student's research committee may be convened. This meeting will include a brief presentation by the student on the work accomplished up to that point, and/or a discussion concerning the problems which have hampered progress. If the consensus of the committee is that the student needs to show improvement, he/she will have 60 days to demonstrate a change in performance. At the end of this time, financial support may be discontinued, if applicable.

If a student finds it necessary to withdraw from the graduate program, then he/she should provide as much notice as possible. In the case of teaching or research assistants, students are expected to complete the semester once it has begun. Similarly, the program will provide a student with as much advance notice as possible if the student is dropped from the program for reasons of poor performance.

Faculty

Program Directors

Professor Benzion Boukai*

Assistant Professor Jaroslaw Harezlak*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Benzion Boukai*, Sujuan Gao*, Siu L. Hui*, Barry P. Katz*, Constantin Yiannoutsos*

Associate Professors

Lang Li*, Xiaochun Li, Patrick O. Monahan, Hanxiang Peng, Susan M. Perkins, Chandan K. Saha, Jyotirmoy Sarkar*, Wanzhu Tu

Assistant Professors

Samiran Ghosh, Jaroslaw Harezlak*, Fang Li, Yunlong Liu, Ryan Martin, Changyu Shen, Menggang Yu

Courses

500 Level

STAT 51200 Applied Regression (3 cr.) P: STAT 51100. Inference in simple and multiple linear regression, residual analysis, transformations, polynomial regression, model building with real data, nonlinear regression. One-way and two-way analysis of variance. Use of existing statistical computing package.

STAT 51300 Statistical Quality Control (3 cr.) P: STAT 51100. Control charts and acceptance sampling, standard acceptance plans, continuous sampling plans, sequential analysis, statistics of combinations, and some nonparametric methods. Use of existing statistical computing packages.

BIOS–S 515 Biostatistical Practicum (1–3 cr.) P: STAT 52100; BIOS S527, S546; or consent of instructor. Real-world projects in biostatistics involving participation in consulting sessions, directed reading in the literature, research ethics, design of experiments, collection of data and applications of biostatistical methods. Detailed written and oral reports required.

STAT 51400 Design of Experiments (3 cr.) P: STAT 51200. Fundamentals, completely randomized design, randomized complete blocks. Latin squares, multi-classification, factorial, nested factorial, incomplete blocks, fractional replications, confounding, general mixed factorial, split-plot and optimum design. Use of existing statistical computing packages.

STAT 51900 Introduction to Probability (3 cr.) P: MATH 26100. Algebra of sets, sample spaces, combinatorial

problems, conditional probability, independence, random variables, distribution functions, characteristic functions, special discrete and continuous distributions, distributions of function of random variables, limit theorems.

STAT 52000 Time Series and Applications (3 cr.) P: STAT 51900. A first course in stationary time series with applications in engineering, economics, and physical sciences. Stationary, auto-covariance function and spectrum; integral representation of a stationary time series and interpretation; linear filtering; transfer function models; estimation of spectrum; multivariate time series; Kalman filtering, Burg's algorithm.

STAT 52100 Statistical Computing (3 cr.) P: STAT 51200. This course demonstrates how computing can be used to understand the performance of core statistical methods and introduces modern statistical methods that require computing in their application. Covers relevant programming fundamentals in at least two programming environments (e.g. SAS and R/Splus).

STAT 52200 Sampling and Survey Techniques (3 cr.) P: STAT 51200 or STAT 51100. Survey designs, simple random, stratified, cluster and systematic sampling; systems of sampling; methods of estimation, ratio and regression estimates, costs; non-response analysis; spatial sampling.

STAT 52300 Categorical Data Analysis Models (3 cr.) P: STAT 52800 or equivalent, or consent of instructor. Generating binary and categorical response data, two-way classification tables, measures of association and agreement, goodness-of-fit tests, testing independence, large sample properties. General linear models, logistic regression, probit and extreme value models. Log-linear models in two and higher dimensions; maximum likelihood estimation, testing Goodness-of-fit, partitioning Chi-square, models for ordinal data. Model-building, selection and diagnostics. Other related topics as time permits. Computer applications using SAS.

STAT 52400 Applied Multivariate Analysis (3 cr.) P: STAT 52800 or equivalent, or consent of instructor. Extension of univariate tests in normal populations to the multivariate case, equality of covariance matrices, multivariate analysis of variance, discriminate analysis and misclassification errors, canonical correlation, principal components, factor analysis.

STAT 52500 Generalized Linear Model (3 cr.) P: STAT 52800 or equivalent or consent of instructor. Generalized linear models, likelihood methods for data analysis, diagnostic methods for assessing model assumptions. Methods covered include multiple regression, analysis of variance for completely randomized designs, binary and categorical response models, and hierarchical log-linear models for contingency tables.

BIOS–S 527 Introduction to Clinical Trials (3 cr.) P: STAT 51200, exposure to survival analysis; or consent of instructor. Prepares biostatisticians for support of clinical trial projects. Topics: fundamental aspects of the appropriate design and conduct of medical experiments involving human subjects including ethics, design, sample size calculation, randomization, monitoring, data collection analysis and reporting of the results.

STAT 52800 Mathematical Statistics I (3 cr.) P: STAT 51900. Sufficiency and completeness, the exponential family of distributions, theory of point estimation, Cramer-Rao inequality, Rao-Blackwell Theorem with applications, maximum likelihood estimation, asymptotic distributions of ML estimators, hypothesis testing, Neyman-Pearson Lemma, UMP tests, generalized likelihood ratio test, asymptotic distribution of the GLR test, sequential probability ratio test.

STAT 52900 Bayesian Statistics and Applied Decision Theory (3 cr.) P: STAT 52800 or equivalent. Bayesian and decision theoretic formulation of problems; construction of utility functions and quantification of prior information; choice of prior; methods of Bayesian decision and inference,; Bayesian computations; MCMC methods; empirical Bayes; hierarchical models, Bayes factors; combination of evidence; game theory and minimax rules, Bayesian design and sequential analysis.

BIOS–S 530 Statistics Methods in Bioinformatics (3 cr.) P: STAT 51200, 51900; or consent of instructor. Covers statistical methods used in many areas of bioinformatics research, including sequence alignment, genome sequencing and gene finding, gene expression microarray analysis, transcriptional regulation and sequence motif finding, comparative genomics, and proteomics. Course is still subject to approval by The University Graduate School.

STAT 53200 Elements of Stochastic Processes (3 cr.) P: STAT 51900 or equivalent. A basic course in stochastic models including discrete and continuous time processes, Markov chains and Brownian motion. Introduction to topics such as Gaussian processes, queues and renewal processes and Poisson processes. Applications to economics, epidemic models, birth and death processes, point processes, and reliability problems.

STAT 53300 Nonparametric Statistics (3 cr.) P: STAT 51900 or equivalent. Binomial test for dichotomous data, confidence intervals for proportions, order statistics, one-sample signed Wilcoxon rank test, two-sample Wilcoxon test, two-sample rank tests for dispersion, Kruskal-Wallis test for one-way layout. Runs test and Kendall test for independence, one and two sample Kolmogorov-Smirnov tests, nonparametric regression.

STAT 53600 Introduction to Survival Analysis (3 cr.) P: STAT 51700. Deals with the modern statistical methods for analyzing time-to-event data. Background theory is provided, but the emphasis is on the applications and the interpretations of results. Provides coverage of survivorship functions and censoring patterns; parametric models and likelihood methods, special life-time distributions; nonparametric inference, life-tables, estimation of cumulative hazard functions, the Kaplan-Meier estimator; one and two-sample nonparametric tests for censored data; semiparametric proportional hazards regression (Cox Regression), parameters' estimation, stratification, model fitting strategies and model interpretations. Heavy use of statistical software such as Splus and SAS.

BIOS–S 546 Applied Longitudinal Data Analysis (3 cr.) P: STAT 51200, 52500; or permission of instructor. Covers modern methods for the analysis of repeated measures, correlated outcomes and longitudinal data. Topics: repeated measures ANOVA, random effects and

growth curve models, generalized estimating equations (GEE) and generalized linear mixed models (GLMMs). Extensive use of statistical software, e.g. SAS, R.

BIOS–S 587 Nonlinear Mixed Models (3 cr.) P: Undergraduate statistics course and familiarity with statistical inference. This course will develop the student's ability to understand the pharmacokinetic/ pharmacodynamic model, fit the nonlinear mixed model through the required software package, conduct the diagnosis of model fitting, perform the hypothesis tests, and provide the interpretation of the data.

600 Level

STAT 61900 Probability Theory (3 cr.) P: STAT 51900, 52800. Theory Measure theory based course in probability. Topics include Lebesgue measure, measurable functions and integration. Radon-Nikodym Theorem, product measures and Fubini's Theorem, measures on infinite product spaces, basic concepts of probability theory, conditional probability and expectation, regular conditional probability, strong law of large numbers, martingale theory, martingale convergence theorems, uniform integrability, optional sampling theorems, Kolmogorov's Three series Theorem, weak convergence of distribution functions, method of characteristic functions, the fundamental weak compactness theorems, convergence to a normal distribution, Lindeberg's Theorem, infinitely divisible distributions and their subclasses.

BIOS–S 621 Advanced Statistical Computing (3 cr.) P: STAT 52100, experience with R/Splus programming. This course covers selected computational techniques useful in advanced statistical applications and statistical research, such as methods for solving linear equations, numerical optimization, numerical integration, Bayesian methods, bootstrap methods, and stochastic search algorithms.

BIOS–S 627 Statistics in Pharmaceutical Research (3 cr.) P: STAT 51200; BIOS S527, S546. An overview of the drug development process, including the various phases of development from pre-clinical to post-marketing. Topics: statistical issues in design, study monitoring, analysis and reporting. Additional topics may include regulatory and statistical aspects of population pharmacokinetics and real world applications.

STAT 62800 Advanced Statistical Inference (3 cr.) P: STAT 51900, 52800, C: STAT 61900. Real analysis for inference, statistics and subfields, conditional expectations and probability distributions, UMP tests with applications to normal distributions and confidence sets, invariance, asymptotic theory of estimation and likelihood based inference, U-statistics, Edgeworth expansions, saddle point method. Course is still subject to approval by The University Graduate School.

BIOS–S 634 Stochastic Modeling in Biomedical and Health Sciences (3 cr.) P: STAT 52800. The aim of this course is to develop those aspects of stochastic processes that are relevant for modeling important problems in health sciences. Among the topics to be covered are: Poisson processes, birth and death processes, Markov chains and processes, semi-Markov processes, modeling by stochastic diffusions. Applications will be made to models of prevalence and incidence of disease, therapeutic clinical trials, clinical trials for prevention of disease, length biased sampling, models for early detection of disease, cell kinetics and family history problems. Course is still subject to approval by The University Graduate School.

BIOS–S 636 Advanced Survival Analysis (3 cr.) P: STAT 53600, 62800. Addresses the counting process approach to the analysis of censored failure time data. Standard statistical methods in survival analysis will be examined, such as the Nelson-Aalen estimator of the cumulative hazard function, the Kaplan-Meier estimator of the survivor function, the weighted logrank statistics, the Cox proportional hazards regression model, and the accelerated failure time model.

BIOS–S 646 Advanced Generalized Linear Models (3 cr.) P: BIOS S546. The theory of classical and modern approaches to the analysis of clustered data, repeated measures, and longitudinal data: random effects and growth curve models, generalized estimating equations, statistical analysis of multivariate categorical outcomes, estimation with missing data. Discussion of computational issues: EM algorithm, quasi-likelihood methods, Bayesian methods for both traditional and new methodologies.

STAT 69500 Seminar in Mathematical Statistics (1–3 cr.) P: Consent of advisor. Individual Study that meets 3 times per week for 50 minutes per meeting for 16 weeks. Course is still subject to approval by The University Graduate School.

BIOS–S 698 Topics in Biostatistical Methods (1–3 cr.) P: Consent of instructor. Directed study and reports for students who wish to undertake individual reading and study on approved topics.

STAT 69900 Research Ph.D. Thesis (1–15 cr.) P: Must have been admitted to candidacy. See advisor for more information. Research required by the graduate students for the sole purpose of writing a Ph.D. Dissertation. Course is still subject to approval by The University Graduate School.

Cellular and Integrative Physiology

School of Medicine

Departmental E-mail: cellphys@iupui.edu

Departmental URL: http://physiology.medicine.iu.edu/

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Graduate training in the department reflects the modern view of physiology as an integrative science, utilizing information obtained from several different levels to gain a better understanding of organ system functions. State-of-the-art techniques are used to study physiological responses at the molecular, cellular, and whole-organ levels. The research interests of the faculty span cardiovascular physiology, cell growth and development, respiratory biology, cancer biology, and signal transduction mechanisms.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Students should have a background in biology, chemistry, physics, and mathematics. Graduate Record Examination (GRE) or Medical College Admission Test (MCAT) scores are required as a part of the application and are used as guidelines for admission together with GPA and letters of recommendation.

Master of Science Degree

Course Requirements

A total of 30 credit hours is required; two options are offered, non-thesis and thesis.

The non-thesis option consists of 30 credit hours of didactic course work. Required courses include: F702 (1 cr.), G715 (3 cr.), G716 (3 cr.), G717 (3 cr.), F613 (5 cr.), G655 (1 cr.), G651 (3 cr.), and G504 (2 cr.). In addition, 9 credits of elective coursework will complete the degree requirements.

The thesis MS option consists of 30 credit hours of both didactic courses and laboratory research. Required courses include: F702 (1 cr.), G715 (3 cr.), G716 (3 cr.), G717 (3 cr.), G735 (2 cr.). The student must also take both G736 (1 cr.) and G735 (2 cr.) or F613 (5 cr.), 3-6 credits of elective, G655 (1 cr.), and either G505 (1 cr.) or G504 (2 cr.). In addition, 12 credits of research (F701) are required.

Thesis

Optional

Final Examination

Oral defense of dissertation with MS thesis option

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including 30 credit hours of formal course work, (of which 12 are in the minor field). Required courses include: G717 (3 cr.), G735 (1 cr.), G736 (1 cr.), G718 (6 cr.), F702 (1 cr.), G855 (1 cr.), G655 (1 cr.), G505 (1 cr.). Three credits of Physiology electives complete the 18 credit hours of course work for the major.

Minor

Comprised of 12 credit hours in one of the following fields: anatomy, biochemistry, microbiology and immunology, pharmacology, medical genetics, neurobiology, life sciences, aging diabetes, imaging, bioinformatics, or cancer biology.

Qualifying Examination

Written and oral.

Final Examination

Oral defense of dissertation.

Other Provision

Participation in Preparing Future Faculty (PFF) program or departmental teaching is required.

Ph.D. Minor in Cellular and Integrative Physiology

Students outside the department desiring to obtain a doctoral minor in physiology must complete a minimum of 12 credit hours in physiology courses other than research (F701) and seminar (F702).

Faculty

Chairperson

Professor Michael Sturek

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

H. Glenn Bohlen*, Richard Day, Janice Froehlich* (Medicine), Patricia J. Gallagher*, Susan J. Gunst*, Maureen Harrington* (Biochemistry), Brian Paul Herring*, Chiu Shuen Hui* (Emeritus), Gary Hutchins* (Radiology), Stephen A. Kempson, Sidney Ochs* (Emeritus), Fredrick M. Pavalko*, Ora Pescovitz* (Pediatrics), Rodney Rhoades* (Emeritus), Simon J. Rhodes*, Carl Rothe* (Emeritus), Michael S. Sturek, George A. Tanner* (Emeritus), Joseph Unthank* (Medicine), Frank A. Witzmann*

Associate Professors

David P. Basile, David R. Bell, Jeffrey S. Elmendorf, James A. Marrs (Medicine), C. Subah Packer*, Jonathan D. Tune

Assistant Professor

Alexander Obukhov

Adjunct Professors

Navin Bansal (Radiology), Robert Bigsby* (Obstetrics), Loren Field* (Medicine, Pediatrics), Lawrence Garetto* (Dentistry), Richard Meiss* (Emeritus), Kenneth R. Olson*, W. Eugene Roberts* (Emeritus), Rex D. Stith, Bonnie Blazer-Yost* (Biology), Ghassan Kassab (Engineering & Technology), Keith L. March* (Medicine)

Adjunct Associate Professors

Robert Considine (Medicine), Stephen F. Echtenkamp*, Brian G. Kennedy*, Daniel Meldrum (Pediatrics), Deborah Thurmond* (Biochemistry & Molecular Biology), Gabi Nindl Waite, Lei Wei (Pediatrics)

Adjunct Assistant Professors

Christopher Burlak* (Surgery), Patrick T. Fueger* (Pediatrics), Steven Miller (Surgery), Michael Murphy (Surgery)

Director of Graduate Studies

Professor Patricia J Gallagher*, Medical Science Building 350D, (317) 278-2146, pgallag@iupui.edu

Master's Degree Graduate Advisor

Professor Patricia J Gallagher*, Medical Science Building 350D, (317) 278-2146, pgallag@iupui.edu

Courses

PHSL–F 503 Human Physiology (4 cr.) P: Introductory biology (K101, K103), and organic chemistry (C341, C342), and physics (P201, P202), or equivalent. Advanced course in human physiology designed for students with no prior exposure to the discipline. Emphasis on basic physiological mechanisms of control with regard to membrane, neural, endocrine, reproductive, muscle, cardiovascular, respiratory, gastrointestinal, renal, and multisystems physiology.

PHSL–F 613 Mammalian Physiology Lecture (5 cr.) Neurophysiology, physiology of muscular activity, respiration, circulation, gastrointestinal physiology, excretion, metabolism, and endocrinology. Emphasis on basic physiological mechanisms and control systems.

PHSL–F 650 Membrane Biophysics (3 cr.) Structure and function of special membranes; mitochondria, RBC, nerve, and muscle.

PHSL–F 701 Research in Physiology (arr cr.)

PHSL–F 702 Seminar in Physiology (1 cr.) Literature reports and group discussion by students and staff.

PHSL–F 705 Molecular and Cellular Physiology (4 cr.) Emphasis is on the principles of cellular structure and function that underlie the physiological functions of many organ systems. Three fundamental topics will be discussed: cell structure, the organization of the cells to form tissues, and cell physiology. Modern techniques in cellular physiology will be covered through critical analysis of the primary research literature. Note: Course not currently offered.

PHSL–F 710 Physiology of Membranes (2 cr.) P: Consent of instructor. Structure and function of cell membranes. Kinetics and energetics of membrane transport. Regulation of intracellular ionic concentrations. Hormonal and pathophysiological modification of membrane function.

PHSL–F 711 Integrative Physiology: Cells to Systems (4 cr.) P: No formal prerequisites; background in basic biochemistry and cell biology or cell physiology is recommended. Introductory physiology course for graduate students covering fundamental concepts of cellular and integrative physiology of tissues and organ systems. Basic physiology of the neural, musculoskeletal, cardiovascular, respiratory, renal, endocrine, and gastrointestinal systems are covered. At the end of the course, students should have a basic understanding of the physiologic functions of cells, tissues, and organ systems and should understand modern approaches for the measurement and interpretation of physiologic functions. Note: Course not currently offered.

PHSL–F 725 Muscle Macromolecules and Contraction (2 cr.) Structure and function of various macromolecules involved in muscle contraction. The aspects covered include excitation-contraction coupling, regulation of myoplasmic free calcium level, the contractile machinery, and force generation. Comparison in skeletal, cardiac, and smooth muscles. Lectures and guided discussion of papers.

PHSL–F 780 Special Topics in Physiology (arr cr.) Tutorial instruction in physiology.

PHSL–F 782 Physiology and Pathophysiology of Lipid Rafts (1 cr.) P: Graduate cell biology. To acquire a core of essential principles about lipid raft structure and comprehensive insight into the functional process of these membrane domains by means of introductory lectures, review of current literature, and group discussions with an emphasis on experimental techniques used to examine membrane physiology.

PHSL–G 640 Epithelial Cell Biology (1 cr.) P: Graduate cell biology. An integrated approach to epithelial structure/function, and role of subcellular organization in physiology and pathophysiology. Emphasis is on reading original reviews, research papers, and demonstration of techniques to study epithelia function in cultured cells, tissues, and model organisms such as zebrafish.

PHSL–G 703 Physiology of the Coronary Circulation (1 cr.) P: Graduate physiology. Advanced study of the physiology, pharmacology, and pathophysiology of the coronary circulation using contemporary methods. Overall goal is to provide a rational basis for functional genomics and modern therapy.

PHSL–G 704 Physiological Proteomics (1 cr.) P: Graduate biochemistry. This is a fundamental-based course on theory and practice of contemporary proteomics techniques. Graduate students will learn to select and apply appropriate proteomic technologies in their research through exposure to protein and analytical, quantitative, and informatic approaches to physiologically relevant biomedical problems.

PHSL–G 706 Designer Mice: Transgenes and Knockout Animals (1 cr.) P: Graduate cell and molecular biology. An advanced course emphasizing strategies for designing genetically modified mouse models.

PHSL–G 707 Physiology of Smooth Muscle (1 cr.) P: Graduate-level physiology course. Advanced study of the physiology of the smooth muscle tissues with focus on the normal physiology and pathophysiology of airway smooth muscle and the airways. Biochemical and physiologic mechanisms in the regulation of contraction, growth, and phenotypic expression in smooth muscle tissues will be explored.

PHSL–G 708 Cardiac and Coronary Physiology of Exercise (1 cr.) P: Graduate integrative physiology. Exercise stimulus, quantification of work, and in vivo responses and adaptations involved in cellular and molecular mechanisms of myocardial and coronary artery responses and adaptations to exercise.

PHSL–G 712 In Vivo Microcirculatory Physiology (1 cr.) P: Graduate physiology. Fundamental roles of the microcirculation are to provide oxygen and nutrients to the living cells, remove wastes, and maintain hydration of the tissues. These functions are best understood from their cellular and biophysical regulation in the in vivo setting.

PHSL–G 713 Angiogenesis (1 cr.) P: Graduate cell biology. Advanced study of angiogenesis. Focus will be on concepts and mechanisms of angiogenic processes.

Methods of assessment of sprouting angiogenesis will be introduced including demonstrations and readings.

PHSL–G 714 Development of the Vascular System (1 cr.) P: F710 and Graduate Cell Biology, or consent of instructor. Advanced study of the development of the vascular system. Concepts of vascular development will be explored with an emphasis on the experimental technique used to unravel organ development. This course may be taken for credit only once.

PHSL–G 735 Cardiovascular, Renal, and Respiratory Function in Health & Disease (2 cr.) P: G715 and G717. This course will advance fundamental elements of cardiovascular function including basic hemodynamics, cardiac function, respiratory function, ventilator mechanics, gas exchange and kidney function, including control of excretion and regulation of body fluid dynamics. An emphasis will be placed on integrative function of different organ systems.

PHSL–G 736 Endocrine and Gastrointestinal Function in Health and Disease (1 cr.) P: G715 and G717. The course emphasizes the use of modern experimental techniques to study mechanisms underlying the physiological function of the gastrointestinal tract and endocrine system. Lectures highlight the molecular and cellular basis for diseases of the gastrointestinal and endocrine systems and how they impact whole animal function.

PHSL–G 761 Molecular and Cellular Physiology of Ion Channels (1 cr.) P: Graduate cellular physiology. Advanced ion transport topics selected from current research on channels, pumps, and exchangers. Topics include transporter biophysical characteristics, long-term regulation, and electrophysiological and optical methods for study.

PHSL–G 762 Renal Physiology (1 cr.) P: Graduate physiology. Reading and discussion of classical papers in renal physiology. Laboratory experiences will include measurement of renal functions using clearance methods and demonstrations of micropuncture and in vivo techniques.

PHSL–G 818 Integrative Cell Biology (3 cr.) This course provides broad understanding of ways in which cells are organized and integrated into tissues. Emphasis is on the function of cells in neural/ neuroendocrine system, cardiopulmonary, renal, and immune systems and in cytomechanics. Modern approaches to the study of tissue function by analysis of cellular regulation will be emphasized.

Clinical Research

School of Medicine
Curriculum
Program Director

Professor Kurt Kroenke*

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Degree Offered
Master of Science, Graduate Certificate

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Science in Clinical Research
Indiana University's Master of Science in Clinical Research degree program prepares health care professionals for a career in clinical research. This program offers a combination of course work and practical research experience and is a core component of Indiana University's Clinical Investigator Training Enhancement (CITE) program. The program also constitutes the formal didactic requirements for certain types of federal training grants (such as K-23s) and other career awards. Following completion of the program, graduates can embark on a career in clinical research with the skills necessary to successfully compete for grant funding, conduct and analyze research findings, and publish work in scientific journals.

Course Requirements

The Master of Science program is divided equally between two main components: (1) completion of the formal curriculum and (2) active involvement in clinical research under the mentorship of a faculty scientist. Both elements are critical in preparation of the candidate for successful research following graduation.

Besides didactic classes, there is substantial research training in scientific writing and grant preparation. The curriculum is designed to cover core competency areas through a combination of course work and mentored research. The two-year M.S. program consists of a 30 credit hour curriculum, which includes the following core courses—G504, G651, G655, G660, G661, G664, N802—and two approved electives.

Grades

An overall average of at least a B (3.0) is required.

Thesis

Research project (see GRAD G664 Mentored Clinical Research) is completed in lieu of thesis.

Graduate Certificate in Clinical Research
This is a 14 credit degree with 3 required courses (G660: Clinical Research Methods, G504: Research Ethics, and G661: Clinical Trials or G651: Biostatistics). These 3 courses will constitute 8-9 credits; the remaining 5-6 credits will consist of graduate-level elective courses that are relevant to the student's clinical interests.

Electives (4-6 cr.) Electives (approved by program director) include graduate-level courses in more advanced biostatistics, epidemiology, clinical pharmacology, genetics, molecular biology, computer sciences, or other courses relevant to the individual student's field of clinical research.

Courses

GRAD–G 504 Research Ethics (2–3 cr.) An introduction to both the theory and practice of research ethics. The course also covers key ethical principles and concepts.

GRAD–G 651 Biostatistics I (3 cr.) The use of computers and statistical software for data analyses, fundamental

statistical concepts including probability and distributions, and application of parametric and nonparametric statistics on continuous and categorical data.

GRAD–G 655 Research Communication (2 cr.) A core didactic set of classes that includes the key elements of scientific writing.

GRAD–G 660 Clinical Research Methods (3 cr.) This course provides instruction in the major types of study design (other than clinical trials) used in clinical research, including cohort, case-control, cross-sectional, survey, and secondary database studies. Also, fundamental themes and special topics in clinical research are covered.

GRAD–G 661 Clinical Trials (3 cr.) This course includes topics in conducting clinical trials, including design, recruitment, informed consent, randomization, blinding, data collection and analysis, safety monitoring, study closeout, and alternative designs such as crossover and nonrandomized trials. Some important research areas besides clinical trials are also covered.

GRAD–G 664 Mentored Clinical Research (7–9 cr.) This is an organized research project in the form of an organized scientific contribution or comprehensive analysis conducted under the mentorship of a faculty scientist from the individual CITE enrollee's core discipline. The capstone experience is submission of an abstract to a scientific meeting, defense of one's research before an advisory committee, and completion of a first-authored paper deemed suitable for publication in a scientific journal.

GRAD–N 802 Techniques in Effective Grant Writing (3 cr.) A core didactic set of classes along with the requirement for completion of a grant to be submitted for intramural or external funding.

Dentistry

School of Dentistry

Departmental E-mail: ds-grad@iupui.edu

Departmental URL: www.iusd.iupui.edu

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy. In addition, the School of Dentistry offers the Master of Science in Dentistry; for details see the School of Dentistry Bulletin.

Special School Requirements

(See also general University Graduate School requirements.)

The M.S. and Ph.D. programs are designed principally for students who expect to enter dental education and research upon completion of their programs. The M.S.D. program is intended for students interested primarily in the specialty disciplines of dentistry.

Master of Science Degree

Graduate work in the School of Dentistry leading to the M.S. degree includes advanced laboratory, lecture, library, and seminar courses in dental materials. (See School of Dentistry Bulletin for M.S.D. programs offered in the advanced specialty disciplines in dentistry.)

Admission Requirements

(1) Degree in dentistry from a recognized school of dentistry or bachelor's degree with appropriate concentration in science (for applicants, other than dentists, who wish to pursue advanced degrees in dental science); (2) overall B (3.0) average; (3) appropriate level of achievement in course work in the major area of concentration; and (4) evidence of potential for success in advanced graduate work, as attested by letters of recommendation from major professors or others familiar with the applicant's academic performance or professional background. A personal interview may be required in some instances.

Grades

Students must maintain an academic average of at least 3.0 (B) on a 4.0 scale.

Course Requirements

A minimum of 30 credit hours of approved courses appropriate to one of the major disciplines given above, including 6 credit hours in an approved minor subject and 6 credit hours of research. Consult the (1) Degree in dentistry from a recognized school of dentistry or bachelor's degree with appropriate concentration in science (for applicants, other than dentists, who wish to pursue advanced degrees in dental science); (2) overall B (3.0) average; (3) appropriate level of achievement in course work in the major area of concentration; and (4) evidence of potential for success in advanced graduate work, as attested by letters of recommendation from major professors or others familiar with the applicant's academic performance or professional background. A personal interview may be required in some instances. See School of Dentistry Bulletin and individual program directors for specific details on curricula. A maximum of 6 credit hours may be allowed for clinical courses.

Thesis

Students must submit a thesis or a manuscript for publication in a refereed journal based on the original research conducted.

Final Examinations

A comprehensive oral and written examination is taken any time after the first semester. A defense of thesis or manuscript; examination is required upon submission of the thesis or manuscript to the student's graduate committee.

Doctor of Philosophy (Ph.D.) Degree in Dental Science

The objective of the Ph.D. in Dental Science Program is to provide a core curriculum that offers a solid scientific base for a career in research and/or teaching in the dental sciences. The Ph.D. degree in Dental Science (Preventive Dentistry, Oral Biology, or Dental Biomaterials track) focuses on basic and clinical science areas as they relate to the human organism and on the effect of dental materials on biological systems. Graduates of this program are ideal candidates for academic teaching and/or research positions in dental schools, medical schools, and other basic science departments as well as for research positions in government institutions and industry.

General Information

Admission Requirements

The program is open to persons who have earned the Doctor of Dental Surgery degree or its equivalent as well as graduates of bachelor of science degree programs. Applicants must have a minimum grade point average of 3.0 or higher on a 4.0 scale (grade point averages from the dental degree in the case of dental school graduates). Candidates for the Ph.D. degree pro;gram must have a minimum percentile score on the Graduate Record Examination (GRE) of 600 in the verbal, quantitative, or analytical section. In addition, a TOEFL score of 550 or higher must be obtained by applicants from non-English-speaking countries.

Program Requirements

The degree requires 90 credit hours with 32–40 required course credits (depending on the choice of track) and 12 credits in a minor. Disciplines included in the program are anatomy, biochemistry, biomedical engineering, biostatistics, cell biology, chemistry, immunology, materials science engineering, mechanical engineering, microbiology, molecular biology, pathology, physics, and physiology.

Minor

The minor consists of 12 credit hours in any one of the advanced basic science courses (anatomy, biochemistry, biomedical engineering, chemistry, materials science engineering, mechanical engineering, microbiology and immunology, pathology, pharmacology, physics, physiology, life science) or their equivalents, as approved by the student's advisory committee and the chairperson of the minor department. Credit hours for the required courses may not count toward the minor courses.

Teaching Experience

All students participate in the predoctoral dental curriculum by tutoring in small problem-based learning (PBL) groups for a total of two PBL blocks after successful completion of the IU School of Dentistry tutor-training program. Students who are non-native speakers of English must demonstrate oral English competency (determined by the IUPUI English as a Second Language [ESL] Program) before they can participate in the PBL sessions. Students are required to enroll in the IUPUI Preparing Future Faculty (PFF) program.

Qualifying Examination (for Admission to Candidacy)

The qualifying exam consists of two parts: 1) writing and presenting an oral defense of a research proposal, and 2) sitting for a comprehensive written examination.

Core Curriculum

Descriptions of the following courses that do not appear on the list of graduate courses in this bulletin can be found in this bulletin or in the School of Medicine or School of Education bulletin.

Oral Biology Track

(The Oral Biology Track core curriculum has a minimum of 44 course credits, composed of 32 required and 12 minor credits.)

Required Courses (32 cr. min.)

Biochemistry (3-5 cr.)
B500 or B800 and G817

Microbiology (3 cr.)
J822 or J510 or J805

General Graduate (16 cr.)
G651, G652, G504 or G505, G865, G655, and EDUC J500, PSY 608 or EDUC R503 or other teaching method course recommended by the program director.

Dental/Oral Biology (10-15 cr.)
R959 or G910 and R956

Research (remainder of 90 cr.)
R957 and R958

Preventive Dentistry Track

(The Preventive Dentistry Track core curriculum has a minimum of 52 course credits, composed of 40 required and 12 minor credits.)

Required Courses (40 cr. min.)
R909, R910, R911, G974, and G959

Courses from the following list can be used to complete the total hours required for the major subject: C607, G900, G905, G911, G965, G967, G973, or R953

General Graduate (13 cr.)
G651, G652, G504 or G505, G655 and EDUC J500, PSY 608 or EDUC R503 or other teaching method course recommended by the program director.

Dental/Oral Biology (10-15 cr.)
G910 or R959 and R956

Research (remainder of 90 cr.)
R957 and G930

Required Dental Sciences Courses for Non-Dental Preventive Dentistry Track Applicants

Applicants without a dental degree may apply for the Preventive Dentistry Track, but are required to take the following courses in the first two years of their program: G981, G969, G988 or G935.

Dental Biomaterials Track

(The Dental Biomaterials Track core curriculum has a minimum of 51 course credits, composed of 39 required and 12 minor credits.)

Required Courses (39 cr. min.)

Biochemistry-Microbiology (3 cr.)
B500 or G959

General Graduate (16 cr.)
G651, G652, G504 or G505, G865, G655 and EDUC J500, PSY 608 or EDUC R503 or other teaching method course recommended by the program director.

Dental Materials (20-22 cr.)
G910, G911, G912, G913, and R956

Elective Classes (determined by the student's advisory committee)
Offered by the Purdue University School of Materials Science and Engineering (MSE) or Indiana University School of Dentistry. MSE 53000 or MSE 23000, MSE 24000, MSE 33500, MSE 35000, MSE 38200, the MSE Graduate Seminar, G865, or M527.

Specialty Courses (determined by the student's advisory committee)

- Polymers (MSE 59700Y, MSE 52500, and MSE 59700B-A and AE 59000M)
- Ceramics (MSE 51000, MSE 51200, MSE 52300, and MSE 55600)
- Metals (MSE 50800, MSE 52200, and MSE 51000)
- Biomechanics (BME 59500C, BME 59500J, and MSE 55600)
- Tissue Engineering (BME 59500E, BMS 52300, BME 60100, BME 60200, and BME 59500B)

Research (remainder of 90 cr.)

- R957 and G921

Faculty

Dean
Professor Lawrence Goldblatt

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

George Stookey* (Emeritus)

Professors

Carl J. Andres (Emeritus), Donald E. Arens (Emeritus), David R. Avery (Emeritus), James J. Baldwin, Jeffrey David Bennett, David T. Brown, William David Browning, Timothy J. Carlson, Jie Chen, Arden Christen* (Emeritus), Michael A. Cochran, Jeffrey Alan Dean, Edward J. DeSchepper, Lawrence P. Garetto*, Lawrence I. Goldblatt, Richard L. Gregory*, E. Brady Hancock (Emeritus), Steven P. Haug, William F. Hohlt (Emeritus), James Earl Jones, Michael Josef Kowolik*, Katherine S. Kula, Melvin R. Lund (Emeritus), Bruce A. Matis, Gerardo Maupome-Carvantes, Chris H. Miller* (Emeritus), B. Keith Moore* (Emeritus), Donald H. Newell, Yoshiki Oshida* (Emeritus), Edwin T. Parks, W. Eugene Roberts Jr.* (Emeritus), Brian J. Sanders, James C. Shanks (Emeritus), S. Miles Standish* (Emeritus), Charles Tomich* (Emeritus), Margot L. Van Dis, Gail F. Williamson, Karen Masbaum Yoder, Domenick T. Zero*, Susan L. Zunt

Associate Professors

William J. Babler, Steven B. Blanchard, Judith R. Chin, T. M. Gabriel Chu, Christianne Guba Cochran, Norman Blaine Cook, Andrea G. Ferreira Zandona, Dominique M. Galli*, , Suteera T. Hovijitra (Emerita), Richard D. Jackson, Vanchit John, Thomas R. Katona*, Joan E. Kowolik, Esperanza Angeles Martinez Mier, Jeffrey A. Platt*, Laura Romito-Cera, Jack Schaaf, Mythily Srinivasan, Jeannie M. Vickery, James A. Weddell, George Philip Willis, L. Jack Windsor*, Nancy Ann Young

Assistant Professors

Parul Agarwal, Masatoshi Ando, Angela Bruzzaniti, , Karen Sue Gregson, Anderson T. Hara*, Mohammed N. Islam, Cheryl A. Krushinski, Frank Lippert, Sean Shih-Yao Liu, R. Hunter Rackley Jr., Stuart M. Schrader, Fengyu Song, Armando Soto, Kelton T. Stewart, Paul A. Zitterbart

Associate Dean for Graduate Education

Michael J. Kowolik*, School of Dentistry 104A, (317) 274-5348

Director of Ph.D. Program

Richard L. Gregory*, OH 123, (317) 274-5349

Earth Sciences

School of Science

Departmental E-mail: kmandern@iupui.edu

Departmental URL: www.earthsciences.iupui.edu

Curriculum

Degree Offered

Master of Science in Geology, with concentration in environmental geology

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Prospective students should have a bachelor's degree in geology, including a summer field course, and a minimum of a B (3.0) average in geology courses. One year of chemistry and mathematics through college algebra and trigonometry are required. Individuals with a bachelor's degree in another area of science are also encouraged to apply; the departmental graduate advisory committee will prescribe a plan of study to remove deficiencies. The Graduate Record Examination General Test is required. Each student must submit three letters of recommendation.

Course Requirements

Both thesis and nonthesis options are available. Both options require at least 21 credit hours of nonresearch course work, with at least 3 credit hours in courses approved for graduate credit from allied sciences, mathematics, or the environmental program of the School of Public and Environmental Affairs (SPEA). Up to 6 credit hours of 400-level courses approved for graduate credit may be counted toward the degree with the approval of the graduate advisor. The thesis option requires the completion of 30 credit hours, 6 of which are taken as G810 Research (the thesis). The nonthesis option requires the completion of 36 credit hours, 3 of which consist of a research project taken as G700 Geologic Problems. The departmental graduate committee must approve elective credits outside the Department of Earth Sciences for both options.

Admitted students will be assigned a three-person advisory committee at the beginning of the first year of

graduate study. The committee will prescribe a study program based on the interests of the student and the principal graduate advisor. Students must complete all degree requirements within six years of beginning this study program. A B (3.0) average or higher must be maintained, and no grade below C is acceptable.

Grades

A B (3.0) average or higher must be maintained; no more than 6 credit hours of C are acceptable.

Faculty

Chairperson

Professor Kevin Mandernack

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Andrew P. Barth*, Gabriel Filippelli*, Kevin Mandernack

Associate Professors

Pierre-Andre Jacinthe, Lin Li, Kathy Licht, Joseph Pachut Jr.*, Gary D. Rosenberg*, Lenore Tedesco*, Philippe Gilles-Francois Vidon

Assistant Professor

Meghna Babbar-Sebens

Senior Lecturer

Jeffrey Swope

Lecturer

Jennifer Nelson

Emeritus Faculty

Frederick Kleinhans* (Physics), Arthur Mirsky*

Adjunct Faculty

Timothy Brothers (Geography), Christopher Craft* (Public and Environmental Affairs), Todd Royer (Public and Environmental Affairs, IUB), Dwight Schuster (Education), Xianzhong Wang (Biology), Jeffrey Wilson (Geography)

Graduate Advisor

Associate Professor Joseph Pachut Jr.*, Engineering/ Science/Technology Building, SL 118, (317) 274-7484

Courses

GEOL–G 525 Glacial Geology (3 cr.) Formation, dynamics, and regimen of glaciers. Erosional and depositional processes and landforms. Glaciation of North America with emphasis on stratigraphy, soils, climates, and physical changes resulting from glacial processes and environments. Field investigations and a student research project required.

GEOL–G 527 Geological Oceanography (3 cr.) P: Graduate standing, G334, and G413. Geological features and processes operating in the oceans; continental shelf, slope and ocean-basin geomorphology, sedimentology, structure, and composition; origin and geologic history of seawater and ocean basins.

GEOL–G 535 Quaternary Geology (3 cr.) P: G415 or consent of instructor. Characteristics, distribution, and origin of Pleistocene and recent deposits; stratigraphy and chronology; formation of associated landforms, landscapes, paleosols, and soils; Quaternary environments. Core: environmental geoscience.

GEOL–G 545 Applied Analytical Techniques in Geology (3 cr.) Principles of advanced analytical techniques including X-ray analysis, electron beam imaging and analysis, and mass spectrometry, with applications in geosciences. Lectures on theory followed by laboratory exercises. Students will complete individual or collaborative research projects.

GEOL–G 546 Planetary Remote Sensing (3 cr.) P: Previous course in remote sensing, or consent of instructor. Application of multi-spectral data for exploration and mapping of planetary surfaces.

GEOL–G 550 Surface Water Hydrology (3 cr.) P: G451 and M216, or consent of instructor. Mechanics of surface runoff and open channel flow. Rainfall-runoff equations, probability analysis of stream flow, and watershed simulation models. Chemistry of surface waters and stream pollution. Core: environmental geoscience.

GEOL–G 551 Advanced Hydrogeology (3 cr.) P: G451. Basic principles and quantitative aspects of physical flow systems and chemistry of ground water and surface water. The relationships between water and geologic materials. Core: environmental geoscience.

GEOL–G 585 Environmental Geochemistry (3 cr.) Aquatic and environmental geochemistry, including freshwater and marine systems, natural and human-induced changes to geochemical systems, and the geochemical record of paleoceanographic and paleoclimatic variations.

GEOL–G 595 Data Analysis Techniques in Geoscience (3 cr.) P: STAT 301 and CSCI 207, or equivalent. Application of statistical and numerical analysis techniques to geoscience data, including sampling methods, confidence intervals, least squares methods, correlation, time series analysis, and multivariate techniques. Emphasis on using a computer to solve geoscience problems.

GEOL–G 601 Clay Mineralogy (3 cr.) P: Consent of instructor. Composition, structure, properties, methods of identification, and origin and distribution of clay minerals.

GEOL–G 621 Modeling Hydrological Systems (3 cr.) Introduction to ground water flow and solute transport modeling. Includes development of equations describing ground water flow and applied ground water/contaminant transport modeling using a variety of current software packages.

GEOL–G 635 Soil Geomorphology (3 cr.) Application of geomorphic principles in evaluation of weathering and soil formation; systems analysis of soil-landscape models; paleogeomorphology and paleopedology. Lectures and discussion; field and laboratory problems.

GEOL–G 640 Fluvial Geomorphology (3 cr.) Survey of fluvial processes including sediment transport, bed

and bank erosion, and river metamorphosis. Examination of the controls on channel form. Analysis of landform genesis with an emphasis on feature sedimentology and stratigraphy. Application of fluvial geomorphic principles to land management and restoration of riparian ecosystems.

GEOL–G 645 Carbonate Sedimentology (3 cr.) P: G334 or consent of instructor. Spring. Course focuses on origin and generation of carbonate grains, description of modern carbonate depositional environments, interpretation of ancient limestone and dolomite sequences, and carbonate diagenesis.

GEOL–G 690 Advanced Geology Seminar (arr cr.) P: Consent of instructor. Seminars on critical research issues and topical themes. S/F grading.

GEOL–G 700 Geologic Problems (1–5 cr.) P: Consent of instructor. Consideration of special geological problems. **This course is eligible for a deferred grade.

GEOL–G 810 Research (arr cr.) **This course is eligible for a deferred grade.

Economics

School of Liberal Arts

Departmental E-mail: rdrenoll@iupui.edu

Departmental URL: http://liberalarts.iupui.edu/economics/

Curriculum

Degree Offered

Master of Arts

Program Information

The Master of Arts in economics has a twofold objective: (1) to provide students with analytical capabilities and research skills for careers in business, government, and the nonprofit sector; and (2) to prepare those who wish to pursue a Ph.D.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Applicants should have completed a bachelor's degree from an accredited institution. Ordinarily, applicants should have a minimum grade point average of 3.0 on a 4.0 scale in their undergraduate course work and in their previous economics courses. Before undertaking graduate study in economics, a student should have knowledge of intermediate-level undergraduate economic theory (E321 and E322), statistics (E270), differential and integral calculus (the IUPUI equivalent is M16500 offered by the mathematics department). Students with deficiencies in economics and/or mathematics may be admitted on a conditional basis.

The verbal, quantitative, and analytical portions of the Graduate Record Examination (GRE) are required, and applicants are urged to complete the examination by December of the year before admission. Requests to substitute GMAT scores for GRE scores will be considered.

Three letters of recommendation are required. For students with English as a second language, a minimum TOEFL score of at least 550 is recommended. Successful completion of ELS 112 will be accepted in lieu of TOEFL for admission.

Master of Arts Degree

Course Requirements

Students must complete a minimum of 30 credit hours of graduate work. Credits are devoted to the following required core courses: E520 Optimization Theory in Economic Analysis, E521 Theory of Prices and Markets, E522 Theory of Income and Employment, E570 Fundamentals of Statistics and Econometrics, and E574 Applied Econometrics and Forecasting.

Grades

The student must receive at least a C (2.0) in each course and must average at least a B (3.0 on a 4.0 scale) for all courses taken.

Dual Degree: Master of Arts in Economics and Master of Arts in Philanthropic Studies

The dual master's degree in economics and philanthropic studies substantially benefits students intending to pursue a career in independent research, academia, or practice. Normally, those pursuing a career in research or academia continue in a Ph.D. program in economics, finance, accounting, management, marketing, or public policy. Very few doctoral programs include substantial content on philanthropy or nonprofit organizations. As such, the M.A. in philanthropic studies provides a broad interdisciplinary background that makes the future researcher sensitive to the institutional details, values, and history of the sector, thus leading to better research. For the future nonprofit manager or leader, economics provides the principles and methodologies to make informed decisions on the appreciative level, the policy level, and the managerial level.

Admission requirements for the dual degree program are identical to those for each program separately. Separate application must be made to each of the two programs. Students are expected to take responsibility for learning about and meeting the admission requirements of each school individually, which may differ from each other in application documents required, minimal standards of criteria for admission, and deadline dates. Students must make plans early with advisors in both programs to identify (1) common courses and (2) thesis credit.

Study for the two degrees can be combined for a total of 51 credit hours rather than the 66 credit hours that would be required if the two degrees were taken separately. Two of the required core courses for the M.A. in economics may be selected as electives to meet the Philanthropic Studies Program requirement for two applied electives. One of the required philanthropic studies courses, ECON E514 The Nonprofit Economy and Public Policy, may be taken to meet 3 of the 12 credit hours of electives required in the economics program. A common thesis meets the requirements of both departments.

Further information regarding regulations governing advanced degree programs may be obtained from the respective departments.

Degree Offered

Ph.D.

Program Information

The PhD program is designed to (i) advance knowledge concerning health economics and philanthropy/nonprofit economics; (ii) develop the skills essential for our graduates to conduct independent research in these two areas.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Ph.D. Admission Requirements

Applicants should have completed a bachelor's degree from an accredited institution. Ordinarily, applicants should have a minimum grade point average of 3.0 on a 4.0 scale in their undergraduate course work and in the major. Before undertaking Ph.D. graduate study in economics, a student is required to have completed coursework covering undergraduate univariate and multivariate calculus (equivalent to MATH M16500, M16600, and M26100 at IUPUI), a calculus-based statistics course or a course in Statistics and one in Econometrics (equivalent to ECON E270 and E470 at IUPUI), and Linear Algebra (equivalent to Math M35100 at IUPUI). The verbal, quantitative, and analytical portions of the Graduate Record Examination (GRE) are required, and applicants are urged to complete the examination by December of the year before admission is desired. Requests to substitute GMAT scores for GRE scores will be considered. Three letters of recommendation are required. Students with English as a second language who have not attended school in the U.S. are required to take either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). For IELTS, applicants must take the academic reading and writing modules. A minimum TOEFL score of at least 570 (230 on computer version or 88 on the internet version) is required. The minimum acceptable IELTS score is 6.5.

Doctor of Philosophy Degree

Fields of Study

Fields of study currently available within the department are health economics and nonprofit/philanthropic economics. Students must take one or both of these fields as well as the course sequence in econometrics.

Course Requirements

A total of 90 credit hours, including the theory sequence E520, E521, E522, E611, E621, and the econometrics-statistics sequence E571, E573, E577, E578, E670, and E673. In addition, starting in their third year, students must formally enroll in a workshop course for a minimum of four semesters. There is a minimum requirement of 61.5 credit hours of course work, including standard Economics courses, Economics workshop courses, and minor or research tool courses. The remaining courses will be taken as thesis credits.

Minor or Research-Skill Requirement

In addition to the formal coursework in Economics the prospective Ph.D. candidate must complete a structured minor in a related area or a research-skill sequence. For those with a primary field in health economics, the minor will usually relate to the health and life sciences disciplines. A minor obtained in areas such as behavioral health sciences, biostatistics, environmental health sciences, epidemiology, or health policy and management would be appropriate, for example. For those with a field in nonprofits/philanthropic economics, a logical minor would be found in Philanthropic Studies or in Nonprofits Management or any of the other Liberal Arts disciplines connected to the study of charitable behavior and nonprofit institutions. The minor must be approved by the student's Advisor or the graduate director of the program. The minor must contain a minimum of three graduate level courses (9 credits) in the chosen area and it must comply with the minor requirements of the respective department/unit. Typically departments require 12 credit hours for a Ph.D. Minor. In cases where it is appropriate, an interdepartmental minor can be arranged with the consent of the DGS. When appropriate, a student may, with the consent of his/her advisor and/or the DGS, substitute a research tool skill of at least 9 credit hours for the Minor. These research tool skills credits will count toward the 90 credit requirement as long as the courses are approved for graduate credit.

Faculty

Chairperson

Professor Paul Carlin*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

David Glenn Bivin*, Paul S. Carlin*, Subir K. Chakrabarti*, Robert B. Harris, Peter Coia Rangazas*, Patrick M. Rooney*, Steven Russell*, Robert Sandy*, Martin C. Spechler*, Richard S. Steinberg*, Mark O. Wilhelm*

Associate Professors

Marc Bilodeau*, Gwendolyn Morrison, Una O. Osili, Anne B. Royalty*

Assistant Professors

Yaa Antwi, Sumedha Gupta, Jaesoo Kim, Jisong Wu, Ye Zhang

M.A. Admissions and Advising

Professor Peter Coia Rangazas*

Ph.D. Admissions and Advising

Associate Professor Anne Royalty*

Courses

ECON–E 420 History of Economic Thought (3 cr.)
Examination of main theoretical developments since the beginning of the systematic study of economics. Theoretical propositions and structures of the earlier

writers will be interpreted and evaluated in terms of modern economic analysis (not currently offered).

ECON–E 504 Mathematics for Economists (1–3 cr.) Topics in mathematics that are particularly useful in the application of microeconomic theory, macroeconomic theory, and econometrics. Topics covered include matrix algebra, comparative-static analysis, constrained optimization, difference equations in discrete time, game theory, and set theory as applied to general equilibrium analysis (not currently offered).

ECON–E 513 Special Topics in Economic History (3 cr.) Explicit methodology and economic analysis applied to major issues in American and European economic history (not currently offered).

ECON–E 514 The Nonprofit Economy and Public Policy (3 cr.) P: E201. The role of nonprofit organizations (universities, churches, hospitals, orchestras, charities, day care, research, nursing homes) in mixed economies. Public policy controversies such as regulation of fundraising, antitrust against universities, "unfair" competition with for-profit firms, and the tax treatment of donations. This course may not be taken for credit by anyone who has received credit in ECON E414.

ECON–E 515 Institutional Setting for Health Economics in the U.S. (1.5 cr.) P: completed or concurrent with E521 and E571. Overview of the structure of the U.S. health care system including health care financing, health care delivery, and government programs. Private and public financing mechanisms as well as government regulation. Comparison of the U.S. system to the health care systems of other countries.

ECON–E 516 Institutional Setting for Nonprofit/ Philanthropic Economics (1.5 cr.) P: E667 and E668. This course provides a broad overview of nonprofit institutions and philanthropic practices, along with a discussion of available data sources on each. We discuss the size and scope of nonprofit organizations, revenues, governance, regulation and taxation, intersectoral relations, patterns of philanthropy, and public policies that affect giving behaviors.

ECON–E 519 Regional Economics (3 cr.) Regional economics is the study of economic behavior in space. The course examines the internal and interregional determinants of growth and decline of a region from supply-and-demand perspectives. Public policies to influence these determinants are considered (not currently offered).

ECON–E 520 Optimization Theory in Economic Analysis (3 cr.) P: Calculus and linear algebra. Introduction to concepts and techniques of optimization theory applied in modern micro and macroeconomics. Theory and application of Lagrange multipliers, comparative statics analysis, valve functions and envelope theorems. Elements of dynamic programming and other methods of economics dynamics.

ECON–E 521 Theory of Prices and Markets I (3 cr.) P: E520. Develops the methodology of economic analysis and teaches the tools and language of price theory. Fundamental elements of consumer theory, producer theory, and economics of uncertainty. Emphasis on comparative statics and the duality theory. Topics include welfare analysis, the theory of price indices, quality of goods, revealed preferences, the theory of derived demand, expected utility theory, attitudes toward risk, and various measures of riskiness.

ECON–E 522 Macroeconomic Theory I (3 cr.) P: E520. Introductory course on macroeconomic dynamics; covers growth models and asset pricing theories, endogenous growth theories, optimal growth problems, and competitive dynamic equilibrium models. Dynamic programming tools introduced as needed. All models are cast in a discrete time setup; presents deterministic and stochastic theories.

ECON–E 528 Economic Analysis of Health Care (3 cr.) A graduate introduction to health economics. Applications of economic theory to problems in various areas in health care. Applications of econometric techniques to the same. Topics include how physicians, institutions, and consumers respond to economic incentives and what policies contribute maximally to efficiency and welfare (not currently offered).

ECON–E 541 Labor Market Analysis (3 cr.) P: Consent of instructor (Indianapolis). An analytical approach to the labor market. Theoretical underpinning and statistical testing of issues in demand and supply of labor, household decision making, human capital, contract theories, unionism, minimum wages, and discrimination (not currently offered).

ECON–E 545 Applied Labor Economics (3 cr.) Discussion of wage rates and working conditions, searches by workers or firms, investment training, quits and layoffs, shirking, discrimination, the division of household labor, retirement, and implicit contracts. The course also examines the impact of institutions such as unions and the government on the efficiency of the labor market (not currently offered).

ECON–E 551 Monetary Economics II (3 cr.) Introduces alternative models of monetary economies; covers topics in monetary economics such as money and growth and optimal money growth. The course takes a unified approach to macroeconomic policy, treating monetary and fiscal policy as jointly determining macroeconomic equilibria. May include discussion of empirical work on money (not currently offered).

ECON–E 568 Public Finance I (3 cr.) P: E360, E470, E521, E522. Partial equilibrium, microeconomic analysis of how tax and subsidy policies affect various types of individual and firm behavior. Theoretical models are introduced to assess and develop quantitative studies of fiscal policy. Summaries of the empirical impact of policy will be formed for the purpose of becoming an "input" in the complete general equilibrium analysis conducted in E569 Public Finance II (not currently offered).

ECON–E 569 Public Finance II (3 cr.) P: E568. Empirical examination of the general equilibrium effects of major tax/subsidy programs, such as personal income taxation, corporate profit taxation, income maintenance, Social Security, and government provision of education. In addition, proposed reforms to these programs will be analyzed using empirically based simulation models (not currently offered).

ECON–E 570 Fundamentals of Statistics and Econometrics (3 cr.) P: E504. Mathematical overview

of statistics and econometrics at graduate level. Topics covered include probability and probability distributions, sampling distributions, tests of hypotheses, estimation, simple regression, multiple regression, generalized linear model and its applications, simultaneous equation systems.

ECON–E 571 Econometrics 1 – Statistical Foundations (3 cr.) P: Undergraduate courses in statistics and calculus. The probability bases for statistical estimation and testing are introduced in the context of issues, theories, and data found in economics. The Classical linear regression model is presented as the starting point for multivariate analyses in econometrics. Students work with various computer programs in and out of the scheduled class periods.

ECON–E 573 Econometrics II (3 cr.) P: E571. Estimation and inference in linear regression model, basic asymoptotic theory, heteroskedasticity, measurement error, generalized least squares, instrumental variable model, maximum likelihood estimation, generalized method of moments, qualitative response models.

ECON–E 574 Applied Econometrics and Forecasting (3 cr.) P: E570. An overview of techniques employed in economic model building, estimation, and usage. Topics covered include single and multiple equation system estimation, limited dependent variable regression techniques, hypothesis testing, policy analysis, and forecasting. Various forecasting techniques are discussed, including smoothing decomposition methods and time series analysis. A number of projects are assigned throughout the semester to give the student hands-on experience with the different techniques.

ECON–E 581 Topics in Applied Microeconomics I (3 cr.) P: E521 and E570 or consent of instructor. This course is a graduate-level introduction to theoretical and empirical applications in two areas of microeconomics. We will demonstrate how economic concepts can be usefully applied to understanding problems in the subdiscipline under study and discuss and apply estimation techniques appropriate for problems in the area.

ECON–E 582 Topics in Applied Microeconomics II (3 cr.) P: E521 and E570 or consent of instructor. This course is a second graduate-level introduction to theoretical and empirical applications in two areas of microeconomics. We will demonstrate how economic concepts can be usefully applied to understanding problems in the subdiscipline under study, and discuss and apply estimation techniques appropriate for problems in the area.

ECON–E 583 Topics in Applied Macroeconomics (3 cr.) P: E522 and E570 or equivalents, or consent of instructor. This course is a graduate-level introduction to theoretical and empirical applications in two areas of macroeconomics. We will demonstrate how economic theories can be usefully applied to understanding problems in the subdiscipline under study and discuss and apply estimation and calibration techniques appropriate for problems in the area.

ECON–E 585 Industrial Organization and Control (3 cr.) P: Consent of instructor (Indianapolis only). Analysis of interrelated structure, behavior, and performance in industrial markets and multimarket corporations; multidimensional nature of competitive processes. Public controls. Topics include patterns of oligopoly, vertical integration, entry barriers; “cartelized” coalescence, limit pricing, price discrimination, long-term contracts; capacity expansion and utilization, resource reallocation, and innovation (not currently offered).

ECON–E 600 Readings in Economics (1–6 cr.) Individual readings and research.

ECON–E 611 Information Economics and Theories of Incentives and Contracts (3 cr.) P: E521. The course covers topics in the theories of incentives and contracts that study situations in which there are explicit or implicit contractual obligations. It explores the role and influence of asymmetric information in determining outcomes with special emphases on moral hazard and adverse selection.

ECON–E 621 Theory of Prices and Markets 2 (3 cr.) P: E520. Analysis of equilibrium, first- and second-order conditions; statistical derivation of demand and cost curves; activity analysis; general equilibrium; welfare economics; microeconomics of capital theory; pure oligopoly and game theory.

ECON–E 643 Health Economics I (3 cr.) P: E515, E573, and E611. Production of health, demand for health, determinants of health, health disparities, international comparisons, cost-effectiveness and valuation.

ECON–E 808 Thesis (M.A.) (arr cr.) **This course is eligible for a deferred grade.

ECON–E 809 Thesis (Ph.D) (arr cr.) **This course is eligible for a deferred grade.

Education

Bloomington and Indianapolis
School of Education

Departmental E-mail: educate@indiana.edu

Departmental URL: http://site.educ.indiana.edu

Departmental Phone Number: (812) 856-8504

Curriculum

Degree Offered

The Doctor of Philosophy (Ph.D.) degree is offered through the University Graduate School. In addition, the School of Education offers the Master of Science (M.S.) in Education, the Specialist in Education (Ed.S.), and the Doctor of Education (Ed.D.) degrees. (See the School of Education Graduate Program Bulletin.)

Doctor of Philosophy Degree

Fields of Study

Counseling psychology; curriculum and instruction; learning and developmental sciences; higher education; history, philosophy and policy studies in education; inquiry methodology; instructional systems technology; language education; urban education; and special education.

Program of Studies

The Ph.D. degree with a major in education is pursued under the direction of a committee appointed by the University Graduate School and the School of Education. As with other Graduate School doctoral programs, a minimum of 90 credit hours of course work is required. This includes a major (selected from the fields of

study listed previously), a minor, a series of research courses, and a dissertation. Written and oral qualifying examinations are taken following course work; a final oral defense of the dissertation research completes the program. Up to 30 credit hours of graduate course work may be transferred from other universities, with the approval of the advisory committee.

Admission

Admission recommendations are made by program area and School of Education admission committees and are based on graduate and undergraduate grades (especially in academic courses), scores on the General Test of the Graduate Record Examination (GRE), and letters of recommendation. The TOEFL examination is required for all international applicants. Online applications may be accessed through the School of Education Office of Graduate Studies Web site at http://www.indiana.edu/~grdschl/admissions.php.

Students earning a Ph.D. degree in education must fulfill all requirements of the University Graduate School (as found in this bulletin) and of the School of Education (as found in the School of Education Graduate Program Bulletin).

Faculty

Professor Gerardo M. González*

Elizabeth Boling*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Chancellor's Professors

Robert Arnove* (Emeritus), Roger Farr* (Emeritus), George D. Kuh* (Emeritus), Frank Lester* (Emeritus), Martha McCarthy*, Rex A. Stockton*

Armstrong Chairs

Jerome Harste* (Emeritus; 1999–2005), Frank Lester* (Emeritus; 2000–2005), Diana Lambdin* (2005–2010), Peter Kloosterman* (20102015)

Jacobs Chair

Thomas Duffy* (1998–2000), Donald Cunningham* (Emeritus; 2000–2005), Sasha Barab*(20052010), Thomas Brush* (2010-2015)

Otting Chair

Erna Alant*(2009-2014)

Rudy Professor of Learning Sciences

Richard Arthur Lesh*

Professors

Valarie Akerson*, Joyce Alexander*, Trudy Banta* (I), Keith Barton*, Barbara Bichelmeyer*, Curtis Bonk*, Marilynne Boyle-Baise*, Catherine Brown, Barry Bull*, Cary Buzzelli*, Phil Carspecken*, Nancy Chism* (I), Gary Crow*, Jack Cummings*, Ginette Delandshere*, David Flinders*, Theodore Frick*, Gerardo M. González*, Jesse Goodman*, Don Hossler*, Thomas Huberty*, Christine Leland* (I), Bradley Levinson*, Mitzi Lewison*, David Mank*, Terrence Mason*, Mary McMullen*, Larry Mikulecky*, D. Keith Morran* (I), Chao-Ying Joanne PengJonathan Plucker*, Charles Reigeluth*, Patricia Rogan* (I), Jose Rosario* (I), Heidi Ross*, Thomas Sexton*, Robert Sherwood*, Martin Siegel*, Russell Skiba*, Neil Theobald*, Vasti Torres*, Susan Whiston*

Associate Professors

Jeffrey Anderson*, John Bean*, Beth Berghoff* (I), Jacqueline Blackwell* (I), Elizabeth Boling*, Gayle Buck*, Gretchen Digman ButeraStephanie Carter*, James Damico*, Barbara Dennis*, Suzanne Eckes, David Estell*, Mary Fisher* (I), Enrique Galindo*, Ken Hay*, Robert Helfenbein, Jr.*(I) Dan Hickey*, Mary Beth Hines*, Signe Kastberg* (I), Robert Kunzman*, Lara Lackey*, Gerardo Lopez*, Marjorie Cohee Manifold*, Luise Prior McCarty*, Alex McCormick*, Brendan Maxcy* (I), Anastasia Morrone*, Khaula H. Murtadha* (I), Jomo Mutegi (I), Martha Nyikos*, Theresa Ochoa* Faridah Pawan*, Douglas Priest*, Gary Pike*(I), Rebecca Martinez Reid*, Floyd Robison* (I), Joshua Smith*(I), Anne Dopkins Stright*, Margaret Sutton*, Annela Teemant (I), Chalmer Thompson* (I), Michael Tracy*, Elizabeth Vallance*, Andrea Walton*

Assistant Professors

Donna Adomat, Scott Bellini, Nathaniel Brown, Yonjoo Cho, Serafin Coronel-Molina*, Peter Cowan, Dionne Cross, Joshua Danish, Dionne Danns, Ryan Flessner (I), Melissa Gresalfi, Amy Hackenberg, D. Ted Hall, Ray Haynes, Crystal Hill (I), Allison Howland(C), Robin Hughes (I), Thomas Nelson Laird*, Anne Leftwich, Adam Maltese, Sylvia Martinez, Meredith Park-Rogers, Kylie Peppler, Leslie Rutkowski, Beth Samuelson, Hannah Schertz, Dwight Schuster (I), Samantha Parades Scribner(I), W. Raymond Smith, Jesse Steinfeldt, Jane Stephenson (I), Thu Suong Thi Nguyen (I), Erik Tillema (I), Ellen Vaughan, Crystal Walcott (C), Mary Waldron, Stacy Weiss, Karen Wohlwend, Y. Joel Wong, Elizabeth Wood (I), Tarajean Yazzie-Mintz

Full Clinical Faculty

Laura Stachowski

Associate Clinical Faculty

Keith Chapin, Mary Jo Dare (I), Barbara Erwin, Carole-Anne Hossler, Paula Magee (I) Elizabeth McCrea

Assistant Clinical Faculty

Kate Baird (C), Danielle DeSawal, Barbara Erwin, Lynn Gillman, Natasha Flowers (I), Lonni Gill (I), Ilknur Kelceoglu (C), Anne Ociepka (I), Aija Pocock (C), Jadora Sailes (I), Joy Seybold (I), Deborah Winikates (C)

Emeriti

Billy L. Abel (I) Anita Aldrich*, Hans Andersen*, Jean Anderson*, Christine Bennett*, William Best (I), Harbans Bhola*, Ellen Brantlinger*, Arthur D. Brill (I), Ron Britton (I), Laurence Brown*, Edward Buffie*, Leonard Burrello*, Ledford Carter, Michael Chiappetta*, Gilbert Clark*, Michael Cohen (I), Ron Dehnke (I), Ivor Davies*, Richard Dever*, Merle Draper*, Earl Dvorak*, J. Marvin Ebbert (I), Lee Ehman*, Susan Eklund*, Meryl Englander*, Gene Faris*, Albert Fink*, Malcolm Fleming*, Thomas

D. Froehle*, Dorothy Gabel*, Robert Gibson*, Richard Gousha*, Thomas Gregory*, Samuel Guskin*, Dale Hall, Robert Harris*, Stuart Hart (I), Robert Heinich*, Ruth E. Holland (I), Ernest Horn*, Gary Ingersoll*, Edward Jenkinson*, Alice Jwaideh*, Susan Klein*, Dennis Knapczyk*, DeWayne Kurpius*, John LeBlanc*, William Lynch*, George Maccia*, James Mahan*, Golam Mannan (I), Gerald Marker*, Milton Marten*,Wendell F. McBurney (I), Edward McClellan*, Jerry McIntosh*, John McKinley*, Howard Mehlinger*, Marianne Mitchell*, Michael Molenda*, Daniel Mueller*, Charlie Nelms, Anabel Newman*, Anna Ochoa*, Norman Overly*, Vernon Pace*, John Patrick*, Lewis Polsgrove*, Joan Prentice*, Gerald Preusz (I), Sharon Pugh*, Edward Robbins (I), Dale Scannell, Thomas Schwen*, Myrtle Scott*, Robert Shaffer*, Mendel Sherman, Carmen Simich-Dudgeon, Carl Smith*, Frederick Smith*, Gerald Smith*, Vernon Smith*, Josephine Spear*, Elizabeth Steiner*, James Walden*, Donald Warren*, James Weigand*, Barbara Wilcox (I), Barbara Wolf*, Hugh Wolf (I), Leslie Wood (I), Virginia Woodward*, Enid Zimmerman*

(I) after a faculty member's name indicates that the person teaches at Indiana University-Purdue University Indianapolis; (C) at Indiana University-Purdue University Columbus.

English

School of Liberal Arts

Departmental E-mail: english@iupui.edu

Departmental URL: http://liberalarts.iupui.edu/english/

Curriculum

Degrees Offered

Master of Arts, Certificate in Teaching English as a Second Language, Certificate in Professional Editing, Certificate in Teaching Writing

Program Information

IUPUI's graduate English program has been designed to prepare students for careers in the analysis and production of "texts." To this end, the program covers issues and skills in reading and writing, in the richest sense of these words, to prepare students to address these issues and to teach these skills. Graduates of the program should be prepared for such careers as teaching writing and literature; teaching English as a second language; and writing for business, government, and other professions.

In contrast to traditional M.A. programs, which place heavy emphasis on literary history, the IUPUI program focuses on the application of English studies to contemporary situations and problems. Because of IUPUI's urban, nonresidential setting, its English graduate program will strive, in its curriculum and scheduling, to meet the special needs of part-time, nonresidential students.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission Requirements

1. Applicants should have a bachelor's degree from an accredited college or university, with a minimum grade point average of 3.0 on a 4.0 grading scale in the student's undergraduate major, documented by an official transcript. Applicants are normally expected to have been English majors, but admission will be considered also for those who otherwise demonstrate the competency necessary for successful graduate work in English.
2. Applicants must have taken the Graduate Record Examination (GRE) General Test; preference is given to those who have earned a score of 600 in at least one of the three areas. Applicants seeking financial support are encouraged to take the examination by December of the year prior to admission.
3. Applicants must submit three letters of recommendation.

Foreign Language Requirements

None, but M.A. students continuing on for the Ph.D. are encouraged to validate their reading proficiency in a foreign language according to University Graduate School standards.

Grades

M.A. students must maintain a 3.0 (B) grade point average.

Course Requirements

Students may select one of the two options outlined below after consulting with the Director of Graduate Studies (DGS) in English and/or other faculty advisors in English. Students will then submit a brief written statement to the DGS that presents a rationale for their choice. As can be seen in the following outline of the two alternative courses of study, students who choose not to write a thesis will be required to take eight additional credit hours of course work, for a total of 40 credit hours.

Thesis Option:

- Required Courses: Students must take two of the program's three core courses for a total of 8 credit hours.
- Electives: Students choose six courses in consultation with a faculty advisor for a total of 24 credit hours. These 24 hours may include a third core course and up to 8 credit hours of Internship.
- Required: MA thesis. 4 Credit hours.
- Total: 36 Credit hours

Non-thesis Option:

- Required Courses: Students must take two of the program's three core courses for a total of 8 credit hours
- Electives: Students choose eight courses in consultation with a faculty advisor for a total of 32 credit hours. These 32 credit hours may include a third core course and up to 8 credit hours of Internship.
- Total: 40 credit hours

The three core courses, which carry 4 credit hours each, provide an introduction to three major areas in the discipline of English: language (G500 Introduction to the English Language), writing (W509 Introduction to Writing and Literacy Studies), and literature (L506 Introduction to Methods of Criticism and Research). All students are required to take two of the three core courses, preferably at the beginning of the graduate program.
Certificate in Teaching English as a Second Language (TESL).

The Certificate in Teaching English as a Second Language (TESL) is a six-course, 21-credit program. The five required courses include ENG G500, G541, and LING L535, as well as LING L532 and L534. The elective course can be chosen from ENG G625, G652, and LING T600; other English courses and courses in other departments relevant to TESL are acceptable with approval from the director. An emphasis in English for Specific Purposes (ESP) can be earned by taking LING T600 as the elective course and completing the practicum in an ESP setting. For more information about the certificate, contact Professor Julie Belz (jbelz@iupui.edu) or visit the IUPUI TESOL Web site at http://tesol.iupui.edu.

Certificate in Professional Editing

See the separate entry for “Certificate in Professional Editing” in the University Graduate Bulletin for more information.

Graduate Certificate in Teaching Writing

The Graduate Certificate in Teaching Writing is a 20-hour program of study for certified middle school or high school teachers, part-time university writing faculty and lecturers in other disciplines, and M.A. students interested in earning a certificate in writing to enhance their professional teaching careers. Major topics include theories and methods of teaching writing; understanding linguistic diversity; uses of technology in writing; social aspects of writing development; non-fiction writing; writing assessment; and teacher research. The Certificate requires completion of five graduate courses consisting of one core course and four elective courses.

Graduate credits earned can be applied toward the M.A. in English upon acceptance into the M.A. For more information, contact Professor Kim Brian Lovejoy (274-2120).

Faculty

Chairperson

Professor Thomas A. Upton

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Ulla M. Connor*, Jonathan Robert Eller*, Karen Marie Kovacik, Missy Dehn Kubitschek*, William M. Plater*, Jane E. Schultz*, William F. Touponce*, Thomas A. Upton

Associate Professors

Julie Belz, Dennis P. Bingham*, Terri A. Bourus, Frederick J. DiCamilla, Stephen L. Fox, Ronda C. Henry, David E. Hoegberg, Marjorie Rush Hovde, Karen R. Johnson, Kim Brian Lovejoy, Thomas Fletcher Marvin, Robert Rebein, Susan C. Shepherd, Jennifer Thorington Springer

Assistant Professors

Mitchell L. H. Douglas, Estela S. Ene

Emeritus Faculty

Professors: John D. Barlow, Barbara Cambridge, Edwin F. Casebeer, Kenneth W. Davis, Sharon J. Hamilton, Helen J. Schwartz, Richard C. Turner.

Associate Professors

Melvin L. Plotinsky, Harriet Wilkins

Graduate Studies Office

For graduate student information and advising, call (317) 274-2258, Cavanaugh Hall 502L.

Courses

Note: 600-level courses in literature may be taught either as topical colloquia or historical surveys, at the discretion of the instructor. All courses at this level will be understood as prefatory to the kind of work done in 700-level seminar courses, without prerequisites.

Note: L701 is a seminar requiring directed individual study and investigation. The prerequisite is advanced graduate standing, or a 600-level course in the subject, or the consent of the instructor; it is recommended that a student take L501 before enrolling in a seminar. With consent of the instructor, a student may take a 700-level course twice for credit.

ENG–G 500 Introduction to the English Language (4 cr.) An introduction to the English language: its nature, structure, and development.

ENG–L 501 Professional Scholarship in Literature (4 cr.) Materials, tools, and methods of research.

ENG–L 502 Introduction to Literacy Studies and the Teaching of College English (2–4 cr.) Historical and cognitive effects of writing, reading, and language use; and the implication of these effects for the teaching and study of literature and writing.

ENG–L 506 Introduction to Methods of Criticism/ Research (4 cr.) The conditions and assumptions of studying English, with emphasis on the application of theory to a culturally and historically diverse range of writings.

ENG–G 541 Materials Preparation for ESL Instruction (4 cr.) Students will learn about materials preparation, syllabus design, and test preparation by applying a variety of theories to books and other ESL (English as a Second-language) teaching devices (e.g., tapes, videotapes, software programs) to evaluate their usefulness and will learn to evaluate ESL materials for adequateness.

ENG–G 625 Introduction to Text Linguistics/Discourse Analysis (4 cr.) This course introduces students to current approaches to text and discourse coherence,

including recent theories of cognitive and interactional text modeling.

ENG–G 652 English Language Sociolinguistics (4 cr.) A survey course in American and British sociolinguistics, this course investigates the theoretical bases, the major works, and the methodological approaches of current sociolinguistics.

LING–L 532 Second-Language Acquisition (3 cr.)

LING–L 534 Linguistics Resources and TESOL (3 cr.)

ENG–L 553 Studies in Literature (1–3 cr.) Primarily for secondary-school and junior-college teachers of English. Emphasis on thematic, analytic, and generic study. With consent of instructor.

ENG–L 560 Literary Studies in England and Scotland (6 cr.) Provides on-site opportunities in England and Scotland to explore the literary landscapes of British authors in relation to the English and Scottish school systems. Designed primarily for education majors and continuing certification credits. Offered biannually. Department is not currently offering this course.

ENG–L 573 Studies of Literary Appreciation I (3 cr.)

ENG–L 590 Internship in English (4 cr.) A supervised internship in the uses of language in the workplace. Each intern will be assigned a problem or task and will develop the methods for solving or completing it. Each intern will complete a portfolio of workplace writing and self-evaluation.

ENG–L 606 Topics in African American Literature (4 cr.) Focuses on a particular genre, time period, or theme of African American literature. Examples: twentieth-century African American women's novels, black male identity in literature, kinship in African American literature, African American autobiography.

ENG–L 625 Shakespeare (4 cr.) Critical analysis of selected tragedies, comedies, history plays, and poetry.

ENG–L 645 English Fiction, 1800-1900 (4 cr.) Intensive historical and critical study of nineteenth-century prose fiction, especially the novel.

ENG–L 655 American Literature and Culture 1900-1945 (4 cr.) Study of American literature and culture from the turn of the century to 1945.

ENG–L 680 Special Topics-Literary Study and Theory (4 cr.) L680 is offered as a Variable Title course.

ENG–L 681 Genre Studies (4 cr.) A variable-title course, Genre Studies examines the specific characteristics of individual genres.

ENG–L 695 Individual Readings in English (1–4 cr.)

ENG–L 699 M.A. Thesis (arr cr.)

ENG–L 701 Descriptive Bibliography and Textual problems (4 cr.)

LING–P 512 Methods and Materials for TESOL 2 (3 cr.) This course aims at enhancing participants' understanding of theoretical principles underlying the preparation of ESL instructional materials as well as participants' knowledge and skills in materials preparation and effective implementation. It also addresses issues related to course design, content selection, and language assessment.

LING–T 600 Topics in TESOL and Applied Linguistics (3 cr.)

LING–T 660 Contrastive Discourse: Readings in Linguistics (3 cr.) This course examines contrastive discourse/intercultural rhetoric and considers the cross-cultural aspects of discourse organization from both the reader's and the writer's viewpoints. Comparisons of text organization in different genres and for different audiences will be made, studying the roles of cultural forms and schemata in the interaction between writer and reader.

LING–T 690 Advanced Readings in TESOL and Applied Linguistics (1–4 cr.)

ENG–W 500 Teaching Composition: Issues and Approaches (4 cr.) Consideration of fundamental issues in the teaching of writing and the major approaches to composition instruction. Specific topics include teaching invention and revision, diagnosing errors, teaching style and organization, making assignments, and evaluating student writing.

ENG–W 502 Fields of Editing: Theories and Practices (4 cr.) An introduction to general copyediting, technical editing, and scholarly editing, the course serves as a prologue to a comprehensive study of manuscript editing. Course content includes the identification and recovery of modern manuscript texts, with an emphasis on physical description, transcription strategies and techniques, and editing of the transcribed text for publication.

ENG–W 503 Technologies of Editing: Producing Letterpress and Electronic Texts (4 cr.) An applied study of contemporary text production, the course examines the standards of accuracy required in professional editing and the way that both text and documentation are prepared for publication. It explores issues of textual preservation, storage, retrieval, and the marketplace as they affect the design and modification of letterpress and electronic texts.

ENG–W 508 Graduate Creative Writing for Teachers (4 cr.) W508 offers current and future teachers insights into the creative process, teaches them to think as writers do, suggests strategies for critiquing creative work, and provides guidance in developing creative writing curriculum. W508 emphasizes hands-on writing activities in three genres, adaptable for use with students at every level.

ENG–W 509 Introduction to Writing & Literacy Studies (4 cr.) This course examines two primary, yet interrelated, threads in postsecondary education: literacy studies and contemporary composition teaching. Students will read, analyze, discuss, and write about key issues in literacy and writing, laying a foundation for further study. The primary goals for this course are for students 1) to understand the theoretical and pedagogical implications of literate activity inside and outside the classroom, 2) to learn how scholars in writing and literacy studies organize their thinking, 3) to recognize different research methods in this field, and 4) to develop skills necessary for professional success in academia.

ENG–W 510 Computers in Composition (4 cr.) Based in current theories about the process of writing, this course

surveys the use of computer programs (such as word processing) as writing tools, computer-assigned instruction as teaching aids, and computer programs as research aids to study writing.

ENG–W 511 Graduate Fiction Writing (4 cr.) A graduate-level fiction writing workshop. Seminar study of advanced techniques in the writing of fiction, both short stories and the novel. Workshop discussion of advanced student work in progress.

ENG–W 513 Graduate Poetry Writing (4 cr.) Offers graduate students an intensive experience in reading and writing poetry. Part workshop and part seminar in poetic practice and technique, W513 provides an opportunity for graduate students to expand their poetic range and hone their craft.

ENG–W 525 Research Approaches for Technical and Professional Communication (4 cr.) Examines the theory and practice of quantitative and qualitative research approaches used by individuals working in technical and professional communication. The course explores both primary (i.e. field) and secondary (i.e. library) research approaches for learning about content, audience, and publication design, providing hands-on experience in multiple research approaches.

ENG–W 531 Designing and Editing Visual Technical Communication (4 cr.) This course explores rhetorical Theories guiding visual communication with in technical publicications, both paper and electronic.

ENG–W 532 Managing Document Quality (4 cr.) Course considers issues in establishing and maintaining quality throughout the document development cycle. Topics may include principles and theories of quality control, establishing quality goals, task analysis and information gathering, usability testing, creating and using style guides, single-sourcing/document reuse, supervising crossfunctional teams, meeting production schedules.

ENG–W 553 Theory and Practice of Exposition (1–3 cr.) Primarily for secondary-school and junior-college teachers of English.

ENG–W 590 Teaching Composition: Theories and Application (4 cr.) Current theories of composition and their pedagogical implications.

ENG–W 600 Topics in Rhetoric and Composition (4 cr.) Covers selected issues in current composition and rhetorical theory. May be repeated once for credit with a different topic.

ENG–W 605 Writing Project Summer Institute (3–6 cr.) By application and invitation only. For teachers from K-university, who together consider major issues involved in the teaching of writing and explore the pedagogical approaches inherent in these issues. The institute explores current theories of writing and their application in the classroom. Preference given to active classroom teachers.

ENG–W 609 Directed Writing Projects (1–4 cr.)

ENG–W 615 Writing Creative Nonfiction (4 cr.) Writing workshop in such modes as personal essay, autobiography, and documentary. Open also to graduate students not in the creative writing program.

ENG–W 697 Independent Study in Writing (1–4 cr.)

Geography

School of Liberal Arts

Departmental E-mail: geogdept@iupui.edu

Departmental URL: www.iupui.edu/~geogdept

Curriculum

Degrees Offered

Graduate Certificate in Geographic Information Science and Master of Science in Geographic Information Science

Special Departmental Requirements

(See also general University Graduate School requirements.)

Grades

B (3.0) average or higher.

Graduate Certificate in Geographic Information Science

Admission Requirements

Bachelor's degree from an accredited institution. Recommended minimum undergraduate GPA of 3.0. Appropriate work experience will also be taken into account in making decisions about admission. Three letters of recommendation and a personal statement.

Course Requirements

Minimum of 15 credit hours, including a core curriculum consisting of G535, G538, and G539. The remaining courses are to be chosen from G536, G539, and G588.

Master of Science in Geographic Information Science

Admission Requirements

Undergraduate degree in geography or related discipline. Recommended minimum undergraduate GPA of 3.0. Appropriate work experience will also be taken into account when making decisions about admission. Satisfactory scores on the Graduate Record Examinations, three letters of recommendation, and personal statement.

Course Requirements

A minimum of 30 credit hours including core requirements in GIS theory and methods from three of the following four courses: G535, G537, G538, G588. All students must take G560 and G539.

Thesis or Research Papers

Students have the option of writing a thesis (G850) or two research papers (G845). Up to 6 credit hours are allowed for a thesis and up to 3 credit hours are given for each research paper.

Faculty

Chairperson

Associate Professor Jeffrey Wilson

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professor

Frederick L. Bein*

Associate Professors

Timothy S. Brothers, Owen John Dwyer, Thomas Stanley Fedor, Jeffrey S. Wilson

Assistant Professors

Aniruddha Banerjee, Daniel Johnson

Director of Graduate Studies

Assistant Professor Aniruddha “Rudy” Banerjee, Cavanaugh Hall 213A, 317-274-3281

Courses

GEOL–G 535 Introduction to Remote Sensing (3 cr.) Principles of remote sensing of the earth and its atmosphere, emphasizing satellite data in visible, infrared, and microwave portions of the electromagnetic spectrum. Emphasis on practical applications and digital image analysis. A satellite data analysis project is required.

GEOL–G 536 Advanced Remote Sensing: Digital Image Processing (3 cr.) P: G535 or consent of instructor. Advanced remote sensing theory and digital image processing techniques with an emphasis on environmental science applications. Hands-on computer exercises provide significant experience in digital image processing techniques for extraction of qualitative and quantitative information about Earth’s terrestrial and aquatic environments.

GEOL–G 537 Computer Cartography and Graphics (3 cr.) Compilation, design, production, and evaluation of maps and related graphic materials. Includes cartometric procedures, symbolization, color use guidelines, map typography, photographic manipulations, computer animation, and geographic visualization techniques.

GEOL–G 538 Geographic Information Systems (3 cr.) Overview of the principles and practices of Geographic Information Systems (GIS). Spatial data models, database design, introductory and intermediate GIS, operations and case studies of real-world GIS applications. Laboratory exercises will provide significant hands-on experience. Lecture and laboratory.

GEOL–G 539 Advanced Geographic Information Systems (3 cr.) P: G538 or consent of instructor. Intermediate and advanced topics in geographic information science and spatial analysis techniques using GIS software. This advanced course is for students who seek a greater understanding of this rapidly developing field and to learn how to construct, manage, and analyze their own GIS data and models.

GEOL–G 560 Geography Internship (1–4 cr.) P: Graduate level courses in geography and consent of instructor. Faculty-directed study of geographical problems based on an internship experience. Student’s area of placement must be related to major field of study. Offered fall, spring, and each summer session. Student may complete more than one internship, but total credit earned cannot exceed 4 credit hours.

GEOL–G 588 Applied Spatial Statistics (3 cr.) P: Consent of instructor. Extension of Traditional Statistical analysis to spatial data. Spatial means and spatial variances, the examination of differences in samples over space, spatial autocorrelation, nearest neighbor analysis, map comparison techniques. Emphasis on practical applications.

GEOL–G 639 Topical Seminar in Geographic Information Science (3 cr.) Applications of geographic information science principles in the collection and analysis of spatial data. Integration of GIS, remote sensing, and GPS technologies. Review of current literature on techniques, theory, technology, and applications with an emphasis on environmental topics. Discussion, laboratory, and research project.

GEOL–G 704 Soils Geography (3 cr.) P: G538. Examines the spatial aspects of soils from a global and local perspective including soil genesis, morphology, and classification; physical, chemical, mechanical and biological properties of soil; and land use mapping, analysis, planning, and management.

GEOL–G 845 Research Papers in Geography (3 cr.) Research papers under the supervision of faculty. Graduate students in the M.S. in Geographic Information Science program who choose the Research Papers option will develop two research papers under the guidance of their graduate advisor (IUPUI Faculty Member) and two other faculty members chosen in consultation with the advisor. The research paper topics will be related to the field of Geographic Information Science in their focus and methods.** **New only to IUPUI.

GEOL–G 850 Masters Thesis (3–6 cr.) Directed research and writing under the supervision of a faculty committee.** **New only to IUPUI.

History

School of Liberal Arts

Departmental E-mail: history@iupui.edu

Departmental URL: www.iupui.edu/~history

Curriculum

Degrees Offered

Master of Arts, dual Master of Arts and Master of Library Science, dual Master of Arts in History and Philanthropic Studies.

The M.A. program in History on the Indianapolis campus offers three areas of concentration: United States history, European history, and public history. United States and European history are traditional areas of concentration and will serve the needs of persons intending to pursue a doctoral program, those seeking a collateral degree to complement such other fields as education or library science, and individuals seeking personal fulfillment. Public history is designed to prepare persons interested in pursuing careers as historians in such settings as historical societies, museums, historic preservation organizations and historic parks, governmental agencies, and business corporations. With its proximity to a large

number of such institutions, the Indianapolis campus is an ideal location at which to pursue a degree in public history.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Master of Arts Degree

Admission Requirements

1. Bachelor's degree from an accredited college or university, with an overall undergraduate grade point average of at least 3.0 (B) and a minimum grade point average of 3.0 (B) in the student's undergraduate major (an undergraduate major in history is not required, but applicants without such a background may be required to take additional course work in history at the undergraduate level as a condition for acceptance into the program);
2. Appropriate level of achievement on the Graduate Record Examination General Test (applicants with a post-graduate degree are not required to submit GRE scores); and
3. Three letters of recommendation.

Foreign Language

There is no foreign language requirement for the degree per se. However, those students who will incorporate foreign language documents in their graduate work (especially those concentrating on European history) will be expected to translate non-English sources. They must thus demonstrate an appropriate level of competence in the relevant language before they begin work on their thesis. The Director of Graduate Studies and the student's advisor may require the student to take additional coursework.

All students concentrating in European history should expect to demonstrate competence in a foreign language, ideally upon application to the program. (Competence is defined as two years of undergraduate coursework with a grade of B or better in the final semester, or demonstration of an equivalent reading proficiency in an approved foreign language exam.). Students considering the possibility of going on for a Ph.D. should recognize that competence in at least one and sometimes two foreign languages is often a requirement in history doctoral programs.

Grades

No grade below B– (2.7) in history courses will be counted toward this degree.

Course Requirements

Students pursuing any one of the three concentration areas must take H500 or H501. Those electing United States history must take at least one graduate colloquium and one graduate seminar in United States history and at least one course in non-United States history. Students electing European history must take a graduate colloquium and seminar in that area and at least one course outside their concentration. With the consent of their faculty advisor, students may take as many as 6 credits outside the Department of History. Six (6) credits will be granted upon successful completion of the required master's thesis. A total of 30 credit hours is required for students concentrating in United States and in European history.

Students choosing public history as their area of concentration must take (1) H500 or H501, (2) H542, and (3) a colloquium and seminar in United States history, and (4) do an internship. Four (4) hours of credit will be granted upon satisfactory completion of the internship project. Public history students must also take at least one course outside United States history. With the consent of their faculty advisor, they may take as many as 6 credits outside the Department of History. Two (2) credits will be granted upon successful completion of the required master's thesis. A minimum of 36 credit hours is required for students concentrating in public history.

Students admitted to the program after completing courses "graduate non-degree" will be allowed, at the department's discretion, to transfer up to nine (9) credit hours toward their degree requirements.

Dual Degree: Master of Library Science and Master of Arts in History

Study for these two degrees can be combined for a total of 53 credit hours rather than the 66 credit hours required for the two degrees if taken separately. Students take 23 credit hours in history, which must include History H547 (Archives), one graduate seminar and one graduate colloquium. No thesis is required for students earning an M.A. degree in history who are also earning a Master of Library Science (M.L.S.) under this dual degree program. No area of concentration is required, but students wishing to focus on public history for the M.A. in history must also include History H542 among the required 23 credits of history course work. Such students may, if they wish, do a public history internship and count a maximum of 2 credit hours of History H543 toward the degree. (Students may enroll in H543 only after having taken or while taking H542.)

The remaining 30 credit hours are taken in the School of Library and Information Science (SLIS). These include 15 credit hours of M.L.S. Foundation courses, 9 credit hours of other required courses, and 6 credits of SLIS electives. See the SLIS Bulletin for details.

Dual Degree: Master of Arts in History and Master of Arts in Philanthropic Studies

The dual M.A. in History and M.A. in Philanthropic Studies creates a unique opportunity to pursue critical inquiry into the historical, cultural, philosophical, and economic implications of voluntary action for the public good. Historians routinely study the role of nonprofit organizations, self-help groups, and philanthropic institutions. This dual degree program offers an interdisciplinary focus on the past, present, and future. This degree will be attractive to students wishing to pursue (1) careers that demand the skills and talents developed by cross-training in history and philanthropy; or (2) doctoral programs that encourage new and creative approaches to the historical study of philanthropy, broadly defined.

Admission requirements for the dual degree program are identical to those for each program separately. A separate application must be made to each of the programs. Prospective students are expected to take responsibility for learning about and meeting the different admission requirements and deadlines of each department. Students

must make plans early with advisors in both programs to identify (1) common courses and (2) a thesis topic.

Study for these two degrees can be combined for a total of 51 credit hours (U.S. or European history concentrations) or 54 credit hours (public history) rather than the 66 or 72 credit hours that would be required if the two degrees were taken separately. For all concentrations, the required 700-level seminar for the M.A. in history may be selected as an elective to meet the philanthropic studies requirement for one of two theoretical electives. The required history courses with philanthropic studies topics HIST H509 (Topic: History of Philanthropy in the West) or HIST H511 (Topic: History of American Philanthropy) may be taken to meet the history requirement for a history elective. Required courses PHIL P542 Ethics and Values of Philanthropy, or PHST P512 Human and Financial Resources for Philanthropy, may be taken to meet 3 credits of the 6 credits of outside electives that may be taken in the history program. For public history students, HIST H543 Practicum meets the requirement for PHST P590 Internship for the Philanthropic Studies program. A common thesis meets the requirements of both departments.

Ph.D. Minor in History

Students in other departments may minor in history by completing, with a grade point average no lower than B (3.0), at least 12 credit hours of course work in history. A minimum of 6 credit hours must be taken on the Indianapolis campus. This course work shall include:

- HIST H501 Historical Methodology (4 cr.)
- Either a 600-level colloquium (e.g., HIST H620, H650) (4 cr.) or a 700-level seminar (e.g., HIST H730, H750) (4 cr.)
- At least 4 additional credit hours (which may include a maximum of 3 credits of HIST H575 Graduate Readings in History)

Certificate in Professional Editing

See the section titled “Professional Editing” for more information.

Certificate in Museum Studies

See the section titled “Museum Studies” for more information.

Faculty

Chairperson

Associate Professor Robert G. Barrows*

Director of Graduate Studies

Associate Professor Kevin Cramer, Cavanaugh Hall 503-M, (317) 278-7744

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Baker-Ort Chair in International Healthcare Philanthropy
William H. Schneider*

Mary O’Brien Gibson Professor

John R. Kaufman-McKivigan*

Professors

David J. Bodenhamer*, Miriam Langsam (Emerita), Sheila Cooper (Emerita), Bernard Friedman* (Emeritus), Ralph Gray* (Emeritus), Philip V. Scarpino, William H. Schneider*, Peter Sehlinger* (Emeritus), Jan Shipps* (Emerita), Marianne S. Wokeck*, Robert G. Barrows*

Associate Professors

Kevin Cramer, Kenneth Cutler (Emeritus), Ch. Didier Gondola, Elizabeth Kryder-Reid (Anthropology), Justin Libby* (Emeritus), Monroe H. Little, Elizabeth Brand Monroe, Berthold Riesterer (Emeritus), Kevin C. Robbins, Jason Kelly, Nancy M. Robertson, Eric Saak, Michael Snodgrass, Xin Zhang

Assistant Professors

Daniella Kostroun, Modupe Labode

Senior Lecturer

Anita Morgan, Erik Lindseth

Courses

HIST–H 500 History of Historical Thought (4 cr.) Approaches to the historian’s craft and reflections on history as a type of scholarly thinking. Recommended for new graduate students and others interested in history as a branch of knowledge. With the consent of the director of graduate studies, may be repeated for credit when the instructor differs.

HIST–H 501 Historical Methodology (4 cr.) Discussion and application of the various methods and strategies used in historical research.

HIST–H 509 Special Topics in European History (3 cr.) Intensive study and analysis of special topics in history of Europe. Topics will vary from semester to semester.

HIST–H 511 Special Topics in United States History (3 cr.) Intensive study and analysis of selected topics in United States history. Topics will vary from semester to semester.

HIST–H 516 History of Philanthropy in the United States (3 cr.) Approaches philanthropy as a social relation between various groups and looks at issues ranging from the relation between government and the economy to African-American activism to women’s roles. The course explores past and current debates about such issues to analyze the past, understand the present, and shape the future.

HIST–H 521 Special Topics in African, Asian, or Latin American History (3 cr.) Intensive study and analysis of selected topics in African, Asian, or Latin American history. Topics will vary from semester to semester, e.g., traditional Asia, modern Asia, Latin American intellectual history.

HIST–H 542 Public History (4 cr.) The application of history to public needs and public programs. Historic preservation, archival management, oral history, editing, public humanities programming, historical societies, etc.

HIST–H 543 Practicum in Public History (1–4 cr.) Internships in public history programs, fieldwork, or research in the historical antecedents of contemporary problems.

HIST–H 546 History of Science, Medicine, and Technology (3 cr.) Study of topics in the history of science, medicine, and technology.

HIST–H 547 Special Topics in Public History (3 cr.) Intensive study and analysis of selected topics in public history. Topics will vary from semester to semester, e.g., to include historic preservation, material history, archival practice, and historical editing.

HIST–H 548 Historical Administration (3 cr.) This course presents an overview of issues faced by administrators and mid-level managers who work in museums, historical societies, archives, special collection libraries, and other cultural resource agencies. Topics, speakers, and readings are focused on issues that are unique to agencies that collect, preserve, and interpret historical resources.

HIST–H 575 Graduate Readings in History (arr cr.) **These courses are eligible for a deferred grade.

School of Informatics

Curriculum

Ph.D. in Informatics

The Indiana University School of Informatics, the first of its kind in the country, was created as a place where innovative multidisciplinary programs could thrive, a program where students can apply the skills of technology to a range of other fields. For current information and specific requirements, go to the website at http://www.informatics.iupui.edu.

All Ph.D. candidates must meet with their academic and/or research advisor for course selection and plan of study. This program is administered with the approval of Indiana University, Bloomington.

Program of Study

Students in the doctoral program will explore the connections among technology, theory, social analysis, and application domains in a diverse and multidisciplinary curriculum. This curriculum will include core courses and seminars in informatics, an information subdiscipline [current subdisciplines are bioinformatics, health informatics, and human-computer interaction]; courses in methodology and theory; electives in related disciplines inside and outside of the School leading to a Ph.D. minor; and a dissertation. In addition, students will be encouraged to pursue internships as part of the elective courses or independent studies of their program.

Bioinformatics

The Bioinformatics track is a 90 credit hour program that includes:

- 15 credit hours of Core A
- 12 credit hours of Core B
- 6 credit hours of seminar courses
- 9 credit hours of electives
- 6 credit hours of rotation
- A minor is required from a sub-discipline
- At least 30 credit hours of dissertation

Areas of Specialization

Faculty research projects often involve representatives from several different research areas working together to develop innovative and even revolutionary new solutions. While students can expect to concentrate in particular areas, they will also be expected to explore the broader significance of their work as well as ways that their expertise can be leveraged to solve problems outside of their own domains.

Areas of Research

Protein structure and function prediction, comparative genomics, structural genomics, fragment assembly in DNA sequencing, systems biology, models of evolution, molecular modeling, drug design, machine learning algorithms, biological database integration, data mining, and biomedical text mining.

Health Informatics Program

The Health Informatics track is a 90 credit hour program that includes:

- 12 credit hours of Core A
- 15 credit hours of Core B
- 6 credit hours of seminar courses
- 9 credit hours of electives
- 6 credit hours of rotation

A minor is required from a subdiscipline 21-30 credit hours of dissertation.

Areas of Specialization

Faculty research projects often involve representatives from several different research areas working together to develop innovative and even revolutionary new solutions. While students can expect to concentrate in particular areas, they will also be expected to explore the broader significance of their work as well as ways that their expertise can be leveraged to solve problems outside of their own domains.

Areas of Research

Electronic medical records, health data exchange, standards and terminology for health data, clinical decision support, consumer health informatics, technology to enhance patient safety, health application development and implementation, cost reimbursement and integrated health information systems. The Health Informatics program has close ties and joint projects with the Veteran Administration Medical Center, Regenstrief Institute, Clarian Health, Methodist Hospital, St. Vincent Hospital, Community Health Network, St. Francis Hospitals, IU School of Medicine, and other local health care systems.

Human Computer Interaction

The Human Computer Interaction track is a 90 credit hour program that includes*:

- 18 credit hours of Core A courses (I541, I561, I563, I543, I575, I624)
- 15 credit hours of Core B courses (I501, I600, I564, I790, I634)
- 6 credit hours of seminar courses (Included in Core A & B)

- 9-18 credit hours of electives
- 3-6 credit hours of research methodology (I575 cannot be included here)
- 6 credit hours of rotation (Included in Core B)
- 9 credit hours (minimum) of a minor is required from a sub-discipline within or outside the School
- 21-30 credit hours of dissertation

(*The HCI Qualifying Examination includes Core A, plus I501.)

Areas of Specialization

Faculty research projects often involve representatives from several different research areas working together to develop innovative and even revolutionary new solutions. While students can expect to concentrate in particular areas, they will also be expected to explore the broader significance of their work as well as ways that their expertise can be leveraged to solve problems outside of their own domains.

Areas of Research

Because HCI is a multidisciplinary discipline, students are encourage to expand the scope of their research to cross-traditional disciplinary boundaries into such areas as: user-centered design, cross-cultural theory and application, related areas within new media such as gaming and virtual reality, computer-mediated communication, usability engineering, health informatics, information visualization, biomedical informatics, android science, social robotics, sensorimotor representation, symbol grounding and symbol emergence, and computational neuroscience, etc.

Additional Requirements for all Ph.D. Programs

Minor

All students will be required to have an appropriate minor from inside or outside the school. Minors will be selected with the advisor's recommendation. The selected minor should be appropriate to the student's choice of sub discipline within Informatics. Some appropriate minors would include: biology or bioinformatics, chemistry or chemistry informatics, health informatics, media arts/studies, cognitive psychology, computer science, information science, or sociology. In all cases the number of hours to be included in the minor will be consistent with the requirements of the unit granting the minors. Some of the courses included in the minor may also count toward the student's methodology or other requirements. Students need a minimum of 9 credits for a minor.

Qualifying Examination, Written (Required)

All students will take a written qualifying examination that covers the core courses (CORE A and B. Consult with the respective Program Directors to see what specific courses are included in the qualifying examination for the three different programs). The examination will be set by a group of faculty who are familiar with the content of the core courses. Examinations will be offered in August. Examinations must be completed by the end of the student's fourth semester in the program. Students who do not successfully complete the examination can retake the examination a second time.

Qualifying Examination, Oral (Required)

1. The oral examination will take place after the student successfully passes the written exam. Students must pass both the written and the oral exam before passing on to candidacy. Only two attempts to pass the oral examination will be allowed.
2. The oral exam will be based on the student's response to the written exam and any material from the core courses.

Dissertation Proposal (Required)

This is an oral review that covers in-depth knowledge of the student's primary research area and dissertation proposal. The research proposal for dissertation must be approved by the student's research committee. That committee may have the same membership as the program committee or the students may choose different members. The advisor for the dissertation will be a faculty member in the School of Informatics and a member of the Graduate Faculty. At least one of the three members of the committee will be based outside of the school. The student will defend the thesis proposal at a public colloquium in the school. The review should be completed within one-year after passing the Qualifying Examinations.

Dissertation (Required)

A written elaboration of significant original research must be successfully presented to the research committee in a public defense as described in the Graduate School Bulletin.

Ph.D. Minor in Bioinformatics

Bioinformatics gathers knowledge and information from various fields such as informatics, chemistry, computer science, medicine, and biology. Students in relevant Ph.D. programs such as biochemistry and molecular biology, medical and molecular genetics, medicine, chemistry, or biology are the target audience for the Ph.D. minor in bioinformatics.

A minor in bioinformatics requires 12 credit hours. The core curriculum consists of graduate-level courses in informatics. Electives may be chosen based on personal interests from a broad list of courses in biology, chemistry, computer science, information science, and medical and molecular genetics.

Requirements

The graduate bioinformatics courses in the School of Informatics assume a minimal knowledge of cell and molecular biology. That level of understanding could be gained with at least 6 undergraduate credit hours in molecular biology, genetics, or evolution.

Faculty

Executive Associate Dean

Anthony Faiola*

Associate Dean for Research and Graduate Studies

Mathew J. Palakal*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

A. Keith Dunker*, Sara Anne Hook, Steven Mannheimer, Anna McDaniel*, Mathew Palakal*, Yaoqi Zhou*

Associate Professors

M. Pauline Baker, Garland C. Elmore, Anthony Faiola*, Edgar Shaohua Huang*, Karl MacDorman*, Gunther Schadow*

Assistant Professors

Davide Bolchini, Jake Chen*, Joseph Defazio*, Josette Jones*, Hadi Kharrazi, Malika Mahoui, Narayanan Perumal*, Mark Pfaff, Pedro Romero

Academic Advisors

Yaoqi Zhou* (Bioinformatics), Mathew Palakal* (Health Informatics), Anthony Faiola* (Human-Computer Interaction), Pauline Baker (Media Arts and Science)

Courses

Core Courses

INFO–I 500 Fundamental Computer Concepts in Informatics (3 cr.) An introduction to fundamental principles of computer concepts for Informatics study, including an overview of computer architecture, computer algorithms, fundamentals of operating systems, data structure, file organization and database concepts. This course is expected to impart the required level of competency in computer science. It may be waived in lieu of six undergraduate credit hours of computer science or informatics coursework, covering areas of programming, discrete structures, and data structures.

INFO–I 501 Introduction to Informatics (3 cr.) P: Graduate standing. Basic information representation and processing; searching and organization; evaluation and analysis of information. Internet-based information access tools; ethics and economics of information sharing.

INFO–I 502 Information Management (3 cr.) Survey of information organization in medical, health, chemical, and biology-related areas; basic techniques of the physical database structures and models, data access strategies, management, and indexing of massively large files; analysis and representation of structured and semi-structured medical/clinical/chemical/biological data sets.

INFO–I 503 Social Impact of Information Technologies (3 cr.) An overview of important social, legal, and ethical issues raised by information technology.

INFO–I 504 Social Dimensions of Science Informatics (3 cr.) Course will examine ethical, legal, and social issues surrounding contemporary research and practice in science informatics. Topics include the nature of science and technology, the ramifications of recent advances in science informatics, and relevant science policy and research ethics. General knowledge of science informatics is assumed.

INFO–I 505 Informatics Project Management (3 cr.) This is a professional introduction to informatics project management and organizational implementation of integrated information solutions. The target audience is informatics project team members likely to pursue informatics project manager roles as well as all members not likely to do so. Through reading, lecture, discussion, practice, and targeted projects, students gain historical perspectives, current awareness, and proficiency with informatics project management terminology, techniques, and technologies.

INFO–I 506 Globalization and Information (3 cr.) Explores the processes that promote and impede movement of human action and informational activities to the most general levels, e.g., the level of the world as a whole. Surveys diverse theories of globalization to identify the best approaches for professional informatics career planning and making information globally accessible.

INFO–I 510 Data Acquisition and Laboratory Automation (3 cr.) This course covers the entire process by which signals from laboratory instruments are turned into useful data: (1) fundamentals of signal conditioning and sampling; (2) interfacing, communications and data transfer; (3) markup languages and capability systems datasets; (4) general lab automation; (5) robotics. A significant portion of this course is devoted to practical learning using LabVIEW.

INFO–I 511 Laboratory Information Management Systems for Health and Life Sciences (3 cr.) This course involves a comprehensive study of Laboratory Information/Laboratory Information Management Systems in the Healthcare and Life Sciences. It consist of the history, applications, case studies, functional requirements, databases, data flow, workflows, system and network architecture, laboratory roles, establishment of these systems including selection, installation, customization, integration, and validation.

INFO–I 512 Scientific and Clinical Data Management (3 cr.) Management and mining of data generated in scientific laboratories and clinical trials for data mining and knowledge discovery requires robust solutions that include knowledge discovery techniques and databases, extraction of data/metadata stored in data warehouses that use Storage Area Networks and dealing with security issues of handling this data.

INFO–I 519 Introduction to Bioinformatics (3 cr.) P: One semester programming course or equivalent. Sequence alignment and assembly; RNA structure, protein and molecular modeling; genomics and proteomics; gene prediction; phylogenetic analysis; information and machine learning; visual and graphical analysis bioinformatics; worldwide biologic databases; experimental design and data collection techniques; scientific and statistical data analysis; database and data mining methods; and network and Internet methods.

INFO–I 525 Organizational Informatics and Economics Security (3 cr.) Organizational process embed implicit and explicit decisions and information control. Security technologies and implementations make explicit organizational choices that determine individual autonomy within an organization. Security implementations allocate risk, determine authority over processes, make explicit relationships in overlapping hierarchies, and determine trust extended to organizational participants.

INFO–I 529 Machine Learning for Bioinformatics (3 cr.) P: INFO I519, or equivalent knowledge. The course covers advanced topics in bioinformatics with a focus on machine learning. The course will review existing techniques such as hidden Markov models, artificial neural network, decision trees, stochastic grammars, and kernel methods. Examine application of these techniques to current bioinformatics problems including: genome annotation and comparison, gene finding, RNA secondary structure prediction, protein structure prediction, gene expression analysis, proteomics, and integrative functional genomics.

INFO–I 530 Seminar in Health Informatics Applications (3 cr.) Presents an overview of the various professional applications and research directions taken in health informatics. Requires directed laboratory experience.

INFO–I 530 Foundations of Health Informatics (3 cr.) This course will introduce the foundation of health informatics. It will review how information sciences and computer technology can be applied to enhance research and practice in healthcare. The basic principles of informatics that govern communication systems, clinical decisions, information retrieval, telemedicine, bioinformatics and evidence based medicine will be explored.

INFO–I 532 Seminar in Bioinformatics (1–3 cr.) Presentation and discussion of new topics in bioinformatics. Concentration on a particular area each semester to be announced before registration. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 533 Seminar in Chemical Informatics (1–3 cr.) Presentation and discussion of new topics in chemical informatics. Concentration on a particular area each semester to be announced before registration. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 534 Seminar in Human-Computer Interaction (1–3 cr.) Topics vary yearly and include the following: information visualization, immersive technologies, designing hypermedia for educational applications, user-centered design techniques and tools, formal methods and cognitive modeling in HCI. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 535 Clinical Information Systems (3 cr.) Clinical Information Systems includes: human computer interface and systems design; healthcare decision support and clinical guidelines; system selection; organizational issues in system integration; project management for information technology change; system evaluation; regulatory policies; impact of the Internet; economic impacts of e-health; distributed healthcare information technologies and future trends.

INFO–I 536 Foundational Mathematics of Cybersecurity (3 cr.) Students will learn mathematical tools necessary to understand modern cyber security. The course will cover introductory mathematical material from a number of disparate fields including probability theory, computational theory, complexity theory, group theory, and information theory.

INFO–I 537 Legal and Social Informatics of Security (3 cr.) This is a case-based course on privacy and security in social contexts. Privacy and security technologies can diverge from their designers' intent. Privacy-enhancing technologies have been used to defeat data protection legislation, and crytographic technologies of freedom can be used by corrupt regimes to protect their records from external view.

INFO–I 538 Introduction to Cryptography (3 cr.) Introduction to the foundational primitives of cryptography and implementations. A primary goal of this course will be to understand the security definitions for each primitive, and how they are used in cryptographic protocols. The ethics of insecure or on-the-fly protocol design will be discussed.

INFO–I 539 Cryptographic Protocols (3 cr.) The class teaches a basic understanding of computer security by looking at how things go wrong, and how people abuse the system. The focus of the class is on how computer systems are attacked, and once this is understood it is possible to propose ways to make the system secure.

INFO–I 540 Data Mining for Security (3 cr.) The objective of this course is to provide an understanding of the impact of data mining in security with a particular focus on intrusion detection. There will be an introduction to data mining where data mining techniques including association rules, clustering and classification are described. Security basics will be presented, focusing on topics such as authentication and access control that are relevant to data mining. This seminar course will explore recent research work in this area and intrusion detection.

INFO–I 541 Human Computer Interaction Design I (3 cr.) This course covers human computer interaction theory and application from an integrated-approach of knowledge domains, i.e., the cognitive, behavioral, and social aspects of users and user context, relevant to the design and usability testing of interactive systems.

INFO–I 543 Usability and Evaluation Methods (3 cr.) Web usability principles (theory) and practices are covered with a semester long project that draws upon relationships between Web and software design and usability engineering. Students also learn a collection of user requirement and testing processes and techniques for the development of more usable interactive systems.

INFO–I 545 Music Information Representation, Search and Retrieval (3 cr.) A comprehensive, comparative study of computer-based representation schemes for music, including those oriented toward music notation, music performance, and music analysis. Overview of musical metadata. Techniques and tools for search and retrieval of music information. Credit not given for both INFO I545 and MUS N564.

INFO–I 546 Music Information Processing: Symbolic (3 cr.) This course deals with both methodology and specific applications that attempt to algorithmically annotate, understand, recognize, and categorize music in symbolic (score-like) form. Particular applications will include key finding, harmonic analysis, note spelling, rhythm recognition, meter induction, piano fingering, and various classification problems such as genre or composer identification. The methodology we will employ will be probabilistic and will include ideas from Machine

Learning such as optimal classifiers, hidden Markov models, and Bayesian networks. Students will have computing assignments, present papers, and be expected to implement solutions to some of the problems we address using a high-level language such as R or Matlab.

INFO–I 547 Music Information Processing: Audio (3 cr.) This course deals with various music analysis and processing problems that use sampled audio as the primary data representation. We discuss digital signal processing including filtering and its relationship to Fourier techniques. Topics include synthesis, effects processing, score following, and blind music recognition, and accompaniment systems.

INFO–I 548 Introduction to Music Informatics (3 cr.) History, issues, and applications in music information technology. Survey of various types of musical information. Introduction to digital musical media, including data standards and processing; database structure and organization standards and processing; database structure and organization of audio-, score-, and text file objects; and discussion of copyright issues.

INFO–I 550 Legal and Business Issues in Informatics (3 cr.) Provides students with a solid foundation on legal and business matters that impact informatics and new media, including intellectual property, privacy, confidentiality and security, corporate structure, project planning, tax implications, marketing, obtraining capital, drafting business plans and working with professionals such as attorneys, accountants, and insurance agents.

INFO–I 551 Independent Study in Health Informatics (1–3 cr.) Independent study under the direction of a faculty member, culminating in a written report. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 552 Independent Study in Bioinformatics (1–3 cr.) Independent study under the direction of a faculty member, culminating in a written report. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 553 Independent Study in Chemical Informatics (1–3 cr.) Independent study under the direction of a faculty member, culminating in a written report. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 554 Independent Study in Human-Computer Interaction (1–3 cr.) Independent study under the direction of a faculty member, culminating in a written report. Total credit for seminars and independent study courses may not exceed nine hours.

INFO–I 556 Biological Database Management (3 cr.) Study about database management and its application to bioinformatics. Topics include data modeling, data indexing and query optimization with a bioinformatics perspective, and database issues in complex nature of bioinformatics data. The course also involves study of current challenges related to bioinformatics data management, data integration and semantic Web.

INFO–I 561 Human Computer Interaction Design II (3 cr.) As a continuation of HCI 1, this course introduces students to advanced HCI theories and practices. Areas of study include: product design research methods and issues underlying design thinking, advanced usability practices, and other human-system interaction models. Thesis research planning, methods, and data analysis will also be covered.

INFO–I 563 Psychology of Human-Computer Interaction (3 cr.) Covers the psychological and behavioral science of human computer interaction, including cognitive architecture, memory, problem-solving, mental models, perception, action, and language. Emphasis is placed on developing an understanding of the interaction between human and machine systems and how these processes impact the design and testing of interactive technologies.

INFO–I 564 Prototyping for Interactive Systems (3 cr.) This course covers methodologies for designing and prototyping graphic user interfaces, including rapid (paper) and dynamic (interactive) prototypes. Principles of design research and visual communication are discussed in the context of interaction design, cognition, and user behavior, as well as usability testing techniques for concept validation.

INFO–I 571 Chemical Information Technology (3 cr.) P: Consent of instructor. Overview of chemical informatics techniques, including chemical structure coding, chemical data representation, chemical database and search systems, molecular visualization and modeling techniques, and the development of chemical informatics software.

INFO–I 572 Computational Chemistry and Molecular Modeling (3 cr.) P: INFO-I571. Computer models of molecules and their behavior in gas and condensed phases; implicit and explicit salvation models; quantum and molecular mechanics; search strategies for conformational analysis, geometry optimization methods; information content from Monte Carlo and molecular dynamics simulations; QSAR; CoMFA; docking.

INFO–I 573 Programming for Science Informatics (3 cr.) Students will receive a thorough understanding of software development for chemical informatics and bioinformatics, and broaden experience of working in a scientific computing group. Topics include programming for the web, depiction of chemical and biological structures in 2D and 3D, science informatics tool kits, software APIS, AI and machine-learning algorithm development, high performance computing, database management, managing a small software development group, and design and usability of science informatics software.

INFO–I 575 Informatics Research Design (3 cr.) P: Undergraduate or graduate course in general statistics. Introduction and overview to the spectrum of research in informatics. Qualitative and quantitative research paradigms, deterministic experimental designs to a posteriori discovery. Issues in informatics research; conceptual, design, empirical, analytical, and disseminative phases of research.

INFO–I 576 Structural Approaches to Systems Biology (3 cr.) Computational approaches to characterizing and predicting tertiary protein configuration, based on known data of atomic, intramolecular and intermolecular interactions. The course presents a balanced and integrative outlook at the various molecular components that determine biological function, sub-cellular

organization, dysfunction and even disease examined at the nanoscale.

INFO–I 578 Data Analysis for Clinical Administrative Decision Making (3 cr.) Focuses on understanding, manipulating, and analyzing quantitative data in nursing and healthcare. Includes use of computer-based systems for data management and statistical analysis. Application and interpretation of multivariate statistical models for decision-making.

INFO–I 581 Health Informatics Standards and Terminologies (3 cr.) Health information standards specify representation of health information for the purpose of communication between information systems. Standards not only standardize data formats, but also the conceptualizations underlying the data structures. The design process of data standards, domain analysis, conceptualization, modeling, and the methods and tools commonly used are explored.

INFO–I 590 Topics in Informatics (1–3 cr.) Variable topic. Emphasis is on new developments and research in informatics.

INFO–I 600 Professionalism and Pedagogy in Informatics (3 cr.) Course will introduce students to topics and skills necessary for entering careers in industry or the academy. Topics covered will include career planning, curriculum development, effective teaching, research ethics, scholarly and trade publishing, grantsmanship, and intellectual property consideration.

INFO–I 601 Introduction to Complex Systems (3 cr.) The course will cover fractals, emergent behavior, chaos theory, cooperative phenomena, and complex networks. Students will learn how to think differently about complexities, finding ways to understand their complexity and addressing the problems they pose.

INFO–I 604 Human Computer Interaction Design Theory (3 cr.) The course will explore, analyze, and criticize underlying assumptions and the rational behind some of the most influential theoretical attempts in HC and related fields. The purpose of the course is to make students aware of how theories can influence practice and to develop critical thinking around the role, purpose, and function for theories.

INFO–I 605 Social Foundations of Informatics (3 cr.) Topics include the economics of information businesses and information societies, legal and regulatory factors that shape information and information technology use, the relationship between organization cultures and their use of information and information technology, and ownership of intellectual property.

INFO–I 611 Mathematical and Logical Foundations of Informatics (3 cr.) An introduction to mathematical methods for information modeling, analysis, and manipulation. The topics include proof methods in mathematics, models or computation, counting techniques and discrete probability, optimization, statistical inference and core advanced topics that include but are not limited to Markov chains and random walks, random graphs, and Fourier analysis.

INFO–I 617 Informatics in Life Science and Chemistry (3 cr.) P: Advanced graduate standing or consent of instructor. Introduces the fundamental notions in genome and proteome informatics and chemical informatics focus. Introduces students to major historical, contemporary, and emerging theories, methods, techniques, technologies and applications in the field of bioinformatics. Students will explore relevant and influential research, results and applications. Students will develop an understanding of leading research approaches and paradigms, and will design an independent research program in relation to their individual research fields and personal interests. The course will focus on research approaches in bioinformatics, emerging technologies in biology and chemistry, and basic computational techniques, using the design and organizing issues in information systems used in those areas. The course is designed for students with no biology or chemistry background, but some knowledge in informatics, who want to learn basic topics in bioinformatics and chemical informatics.

INFO–I 619 Structural Bioinformatics (3 cr.) Course covers informatics approaches based on the sequence and 3D structure of biological macromolecules (DNA, RNA, Protein) whose objective is to improve our understanding of the function of these molecules. Topics will include molecular visualization; structure determination, alignment, and databases; and prediction of protein structure, interactions, and function.

INFO–I 621 Computational Techniques in Comparative Genomics (3 cr.) Course will summarize computational techniques for comparing genomes on the DNA and protein sequence levels. Topics include state of the art computational techniques and their applications: understanding of hereditary diseases and cancer, genetic mobile elements, genome rearrangements, genome evolution, and the identification of potential drug targets in microbial genomes.

INFO–I 624 Advanced Seminar I – Human Computer Interaction (3 cr.) P: Advanced graduate standing or consent of instructor. Introduces students to major historical, contemporary and emerging theories, methods, techniques, technologies and applications in the field of Human-Computer Interaction. Students will explore relevant and influential research, results and application. Students will design an independent research program in relation to their individual research fields and personal interests.

INFO–I 627 Advanced Seminar I – Bioinformatics (3 cr.) P: Advanced graduate standing or consent of instructor. Introduces students to major historical, contemporary, and emerging theories, methods, techniques, technologies and applications in the field of bioinformatics. Student will explore relevant and influential research, results and applications. Students will develop an understanding of leading research approaches and paradigms, and will design an independent research program in relation to their individual research fields and personal interests. The course will focus on research approaches in bioinformatics, and emerging technologies in biology and chemistry, and basic computational techniques.

INFO–I 634 Advanced Seminar II – Human Computer Interaction (3 cr.) P: Advanced graduate standing or consent of instructor. Introduces students to major historical, contemporary and emerging theories, methods, techniques, technologies, and applications in the field

of Human-Computer Interaction. Students will explore relevant and influential research, results and applications. Students will develop an understanding of leading research approaches and paradigms, and will design an independent research program in relation to their individual research fields and personal interests.

INFO–I 637 Advanced Seminar II – Bioinformatics (3 cr.) P: Advanced graduate standing or consent of instructor. Introduces students to major historical contemporary and emerging theories, methods, and techniques in the field of Bioinformatics. Students will examine and explore relevant and influential research, results and applications. Students will develop an understanding of leading research approaches and paradigms, and will design and independent research program in relation to their individual research fields and personal interests. The course will focus on research approaches in bioinformatics, emerging technologies in biology and chemistry, and basic computational techniques.

INFO–I 641 Business of Health Informatics (3 cr.) This class focuses on the economic importance of healthcare information technology adoption for value realization, as a strategic asset, as an investment, and transformation toward integrated decision making. Topics covered include but are not limited to implementation of Decision Support System, barcode tracking, Electronic Health Records, pay-for-performance, incentives for e-prescribing.

INFO–I 642 Clinical Decisions Support Systems (3 cr.) This course provides an overview of the background and state-of-the-art Clinical Decision Support Systems (CDSS). Topics include: the design principles behind clinical decision support systems, mathematical foundations of the knowledge-based systems and pattern recognition systems, clinical vocabularies, legal and ethical issues, patient centered clinical decision support systems, and the applications of clinical decision support systems in clinical practice.

INFO–I 643 Natural Language Processing and Text Mining for Biomedical Records and Reports (3 cr.) This course familiarizes students with applications of Natural Language Processing and text mining in health care. While the course provides a short introduction to commonly used algorithms, techniques and software, the focus is on existing health care applications including clinical records and narratives, biomedical literature and claims processing.

INFO–I 646 Computational Systems Biology (3 cr.) Introduction on how Omics data are generated, managed, analyzed from large-scale computational perspectives, exploring computational resources, especially biological pathways for integrative mining and computational analysis, representing and modeling multi-scale biological networks, relating static/dynamic properties to the understanding phenotypic functions at the molecular systems level.

INFO–I 651 The Ethnography of Informatics (3 cr.) Introduces ethnography as a social science methodology and way of knowing with which to study information and its social contexts. Places ethnography in relation to other research methodologies relevant to the production of the Informatics knowledge base. Trains students in the use of a broad range of ethnographic techniques relevant to study of automated information technology in use. Designed to be open to students from other programs with sufficient methodological and substantive background.

INFO–I 656 Translational Bioinformatics Applications (3 cr.) This course entails a cohesive approach to the theory and practice of bioinformatics applications in translational medicine [TM]. It includes topics related to the complexities of low, medium and high-throughput applications in TM and powerful solutions to TM data management problems by employing various informatics frameworks.

INFO–I 667 Advanced Seminar II in Health Informatics II (3 cr.) Advanced graduate seminar in health informatics, designed to complement INFO- I530, Seminar in Health Informatics Applications. This seminar is intended for graduate students enrolled in the Informatics Doctoral Program, taking the Health Informatics Track.

INFO–I 668 Seminar in Health Informatics II (3 cr.) Seminar course covers a variety of research areas in the discipline of health informatics. The seminars provide the students with an opportunity to enrich their academic experience by improving communication and presentational skills, improving interaction with other professionals, extending knowledge in related disciplines, and keeping updated with current issues.

INFO–I 690 Topics in Informatics (1–3 cr.) P: Graduate standing. Variable topic. Emphasis is on new developments and research in informatics. Course in intended for Ph.D. students in the School of Informatics.

INFO–I 691 Thesis/Project in Health Informatics (1–6 cr.) The student prepares and presents a thesis or project in an area of health informatics. The product is substantial, typically multi-chapter paper or carefully designed and evaluated application, based on well-planned research of scholarly project. Details are worked out between the student and the sponsoring faculty member.

INFO–I 692 Thesis/Project in Bioinformatics (1–6 cr.) The student prepares and presents thesis or project in an area of bioinformatics. The product is substantial, typically a multi-chapter paper or carefully designed and evaluated application, based on well-planned research or scholarly project. Details are worked out between student and sponsoring faculty member.

INFO–I 693 Thesis/Project in Chemical Informatics (1–6 cr.) The student prepares and presents a thesis or project in an area of chemical informatics. The product is substantial, typically multi-chapter paper, or a carefully designed and evaluated application, based on well-planned research or scholarly project. Details are worked out between the student and sponsoring faculty member.

INFO–I 694 Thesis/Project in Human-Computer Interaction (1–6 cr.) The student prepares and presents a thesis or project in an area of Human-computer interaction. The product is substantial, typically multi-chapter paper, or a carefully designed and evaluated application, based on well-planned research or scholarly project. Details are worked out between the student and sponsoring faculty member.

INFO–I 698 Research in Informatics (1–12 cr.) Research under the direction of a member of the graduate faculty that is not dissertation related.

INFO–I 699 Independent Study in Informatics (1–3 cr.) Independent readings and research for Ph.D. students under the direction of a faculty member, culminating in written report.

INFO–I 790 Informatics Research Rotation (3 cr.) Work with faculty, investigate research opportunities.

INFO–I 798 Professional Practice/Internship (0 cr.) Provides for participation in graduate level professional training and internship experience.

INFO–I 890 Thesis Readings and Research (1–12 cr.) Research under the direction of a member of the graduate faculty leading to a Ph.D. dissertation.

Required Elective Graduate Courses

Note: A student's committee, working in conjunction with an Informatics committee designated to oversee the minor, will decide what elective courses are appropriate for a given student.

CSCI 548 Algorithms in Bioinformatics (3 cr.)

GRAD 652 R607 Biostatistics II (3 cr.)

GRAD–R 607 Advanced Statistics (3 cr.)

NURS 630 Introduction to Nursing Informatics (3 cr.)

NURS 635 Consumer Health Informatics (3 cr.)

New Media

NEWM–N 500 Principles of Multimedia Technology (3 cr.) This course examines issues related to digital media communication in the context of e-commerce and the information industry, especially its impact on the cultural, economic, social, and ethical dimensions of local and global communities. Topics also include: usability, intellectual property, and a diversity of user markets for new media products.

NEWM–N 501 Foundations of Digital Arts Production (3 cr.) This course examines the production process and management of digital multimedia. Students investigate and produce projects by researching foundations in the use of digital video with special emphasis on production process of storytelling. Skills learned will include: project development and video production. Students will develop presentation skills through research papers.

NEWM–N 502 Digital Media Motion and Simulation Methods (3 cr.) Applications in animation/simulation design and creation using computer desktop tools. Examines the fundamentals of three-dimensional animation through storyboards and planning, modeling, texturing, lighting, rendering, and composite techniques. Topics will include nurbs design development, texture mapping for realism and stylistic output, keyframe and path animation, and cinematography lighting techniques. Skills will be developed through design and modeling of individual or team multidisciplinary projects.

NEWM–N 503 Digital Media Application Design Processes (3 cr.) Presents the principles and fundamentals of design techniques using authoring tools on PC, Macintosh and emerging computer platforms. Included are storyboarding, planning and organization of scripts, use of current technology, computers, video, and digital arts equipment; computer-assisted design and project planner software tools and management of design team concepts.

NEWM–N 504 Advanced Interactive Design Applications (3 cr.) Incorporates extensive analysis and use of computer and multimedia authoring tools intended for character simulation design. The course will study the concepts of physics based bipedal movement in relation to gravity, balance, anticipation, potential energy, personality constructs, and locomotion. Assessment modeling for character depiction and animation will be planned and storyboarded. Other topics include more advanced facets of computer animation including paint tube modeling, layered, texture mapping, and track and block animation for cyclical actions.

NEWM–N 505 Internship in Media Arts and Technology (3 cr.) An internship program for students to work with and learn from experts in media (digital arts) technology fields who developing and using new applications in commercial and educational settings. Requirements for interns include the development of a technology project proposal; interview; resume; and project presentation; on-site intern residency; project report; oral and media presentation of project outcomes.

NEWM–N 506 Media Arts and Technology Project (1–6 cr.) Students create and orally present a multimedia teaching/training project combining elements of digital media technology including CD-ROM, videodisc, digital audio and video, MIDI, and Internet applications. Requirements include technology project proposal development; oral presentation of proposal, research and development of project, project final report, and the presentation of project. Final project to be submitted in digital form for permanent archive.

NEWM–N 510 Web Database Concepts (3 cr.) Addresses diverse issues arising when designing World Wide Web interface. Basic database concepts will be presented but the course will focus on discussion of interface issues specific to Web databases, technologies for linking databases to Web servers for delivery, discussion of various Web database applications, case studies, and industry trends.

NEWM–N 553 Independent Study (1–3 cr.) This course provides graduate students in the New Media Program an opportunity to work on a project that is beyond any other existing new media courses. The course focuses on developing graduate students with evaluation, synthesis and analysis abilities through a project to obtain an in-depth knowledge of new media within a context of their choice. A graduate student could be engaged in a research project or a production project.

Medical and Molecular Genetics

School of Medicine
Departmental E-mail: medgen@iupui.edu

Departmental URL: www.iupui.edu/~medgen

Curriculum

Degrees Offered

Master of Science in Medical Genetics and Doctor of Philosophy

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Bachelor's degree or its equivalent, including two years of chemistry, mathematics through calculus, two years of biology, and one course in principles of genetics. Promising students deficient in one or more areas may be accepted if it appears to the admissions committee that deficiencies can be removed during graduate study. Results of the Graduate Record Examination (GRE) General Test must be available before applicants can be considered for admission.

Master of Science Degree

Course Requirements

A minimum of 30 credit hours of approved courses, including no more than 7 credit hours of research. At least 20 credit hours must be taken in medical genetics or approved equivalents, including at least four of the following five areas with grades of B or higher: basic human genetics, clinical genetics, cytogenetics, molecular and biochemical genetics, and population genetics. Students in the genetic counseling study track, to meet requirements to take the certification examination of the American Board of Genetic Counseling, are required to have courses in all five areas plus additional required course work totaling 36 credit hours. Genetic counseling students must obtain a B (3.0) or higher in all core courses.

Thesis

Optional. With approval of the department, a refereed publication or an additional 6 credit hours of non-research course work beyond the required 30 credit hours may be substituted for the thesis. Genetic counseling students must choose either a thesis, case report with literature review, or educational project, in addition to the required 36 credit hours.

Final Examination

The student must pass a comprehensive oral or written examination as determined by the student's committee. Under exceptional circumstances, the student may petition the committee to be permitted to take the final examination one additional time.

Program Termination

Academic or research deficiency will result in termination of the student's enrollment in the program.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours plus dissertation with 30-33 credit hours of non-research courses in medical genetics, including G504 or equivalent. Appropriate courses in the Departments of Anatomy, Anthropology, Biochemistry, Mathematics, Microbiology, Pharmacology, and Biology may be accepted for credit toward the major with prior approval of the student's advisory committee. Up to 30 credit hours of nonclinical medical or dental courses may apply toward the Ph.D. degree.

Minor

Must be taken in a field related to the major, e.g., aging, anthropology, bioinformatics, biology, biomolecular imaging, biotechnology training, cancer, cellular and molecular biology, diabetes and obesity, epidemiology, immunology, life science, microbiology, neurobiology, pharmacology, or public health.

Qualifying Examination

Comprehensive written and oral examination. Examination over the minor field at the discretion of the minor field department.

Research Proposal

Written research proposal, presented and defended orally, required for admission to candidacy.

Final Examination

Oral defense of dissertation.

Program Termination

Research or academic deficiency, including two failures of the qualifying examination, will result in termination of the student's enrollment in the program.

Faculty

Chairperson

Professor Kenneth Cornetta*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Bernardino Ghetti* (Pathology and Laboratory Medicine, Psychiatry, Neurology)

Chancellor's Professor

Tatiana Foroud*

Professors

Joe Christian* (Emeritus), Simon Conway* (Pediatrics), Mary Dinauer* (Pediatrics), Michael Econs* (Medicine), Howard Edenberg* (Biochemistry and Molecular Biology), Anthony Firulli (Pediatrics), David Flockhart* (Pharmacology), Alan Golichowski (Obstetrics and Gynecology), Debomoy Lahiri* (Psychiatry), Linda Malkas (Hematology/Oncology), Eric Meslin* (Medicine), John Nurnberger Jr.* (Psychiatry), Catherine Palmer* (Emeritus), R. Mark Payne* (Pediatrics), Kimberly Quaid*

(Psychiatry), Terry Eugene Reed* (Emeritus), Andrew Saykin (Radiology), William Schneider* (Liberal Arts), Gail H. Vance* (Pathology and Laboratory Medicine), Ronald Wek* (Biochemistry)

Associate Professors

Sherif Farag (Hematology/Oncology), David Paul Gilley, Brittney-Shea Herbert, Reuben Kapur* (Pediatrics), Marc Mendonca (Radiation Oncology), Nuria Morral*, Jill Murrell* (Pathology), Elliot D. Rosen, Weinian Shou* (Pediatrics), Kenneth E. White, Xin Zhang

Assistant Professors

Angelo Cardoso* (Hematology/Oncology), Nadia Carlesso (Pediatrics), Rebecca Chan* (Pediatrics), Brenda Rose Grimes, Jeesun Jung, Yunlong Liu (Biostatistics), Anna Malkova (Biology), Scott Whiting

Associate Research Professor

Stephen Dlouhy

Assistant Research Professor

Daniel Koller

Clinical Associate Professors

Virginia Thurston, Frederick Unverzagt (Psychiatry)

Assistant Scientist

Hiromi Tanaka

Joe C. Christian Professor of Medical and Molecular Genetics

Kenneth G. Cornetta* (Medicine, Microbiology)

Graduate Advisor

Associate Professor Brittney-Shea Herbert, Medical Research and Library Building 130, (317) 274-2241

Courses

General

MGEN–Q 580 Basic Human Genetics (3 cr.) P: General genetics and consent of the instructor. An introduction to the genetics of human traits and heritable diseases. Emphasis will be on general aspects of eukaryotic genetics as it applies to humans, but some prokaryote genetics will be included for comparison.

MGEN–Q 606 Foundations in Genetic Counseling (3 cr.) Introduction to the principles and practice of genetic counseling. Topics include genetic counseling techniques, prenatal diagnosis counseling, pediatric/adult counseling, and support services.

MGEN–Q 610 Clinical Genetics Practicum (3 cr.) P: Consent of the instructor. Methods for obtaining medical and family histories, approaches to evaluation of individuals and families with genetic disorders, and techniques for providing genetic counseling.

MGEN–Q 611 Genetics Analysis Laboratory (1–2 cr.) P: Consent of the instructor. (Currently inactive.) Computer storage and retrieval of family data. Use of programs for genetic analysis. Includes analysis of twins, families of twins, and genetic linkage and segregation.

MGEN–Q 612 Molecular and Biochemical Genetics (3 cr.) Molecular and biochemical aspects of gene function in various genetic disorders. Emphasis on the DNA lesion when known, on aberrations in the metabolic pathways, and on structural defects. Discussion of hemoglobinopathies, phenylketonuria, storage diseases, and other conditions.

MGEN–Q 613 Molecular and Biochemical Genetics Laboratory (2 cr.) The student will learn to perform many of the molecular and biochemical techniques for the determination of genetic markers that can be used for diagnosis, genotyping, and forensic applications.

MGEN–Q 614 Psychological Aspects of Genetic Counseling (3 cr.) P: One course in introductory or abnormal psychology. Introduction to theory and research in the field of genetic counseling. Topics include risk assessment, attitude assessment, and decision-making. The social, ethical, and legal aspects of the delivery of genetic services are also covered.

MGEN–Q 615 Prenatal Diagnosis Practicum (3 cr.) Training in prenatal genetic counseling. Counseling referrals may include advanced maternal age, abnormal prenatal screening, abnormal ultrasound, or other pregnancy complications.

MGEN–Q 616 Specialty Clinics Practicum (2 cr.) P: Consent of the instructor. An overview of the long-term management of patients living with a variety of genetic conditions. Students may provide genetic counseling while in these clinics.

MGEN–Q 617 Genetic Counseling Practicum (1–2 cr.) P: Q606, Q610, consent of instructor. Practice advanced genetic counseling skills in a weekly clinic. Develop proficiency in pedigree construction, patient education, and psychosocial assessment/counseling.

MGEN–Q 620 Human Cytogenetics (3 cr.) P: Consent of the instructor, basic genetics. Study of chromosome structure and replication, X-inactivation, meiosis, numerical and structural rearrangements in humans, and cytogenetics of malignancies.

MGEN–Q 621 Human Cytogenetics Laboratory (3 cr.) P: Basic genetics, Q620, and consent of instructor. Current techniques in human cytogenetics. May be taken concurrently with Q620.

MGEN–Q 622 Cytogenetics of Malignancies (2–3 cr.) P: Consent of instructor. This course will examine the biologic implications of cytogenetic abnormalities found in malignancies. Aberrant gene function as a result of cytogenetic abnormalities will be stressed.

MGEN–Q 625 Introduction to Clinical Genetics (1 cr.) This class will introduce the students to the broad areas of practice in clinical genetics, the ethical, legal, and social issues involved in the care of patients and families with genetic disorders, and the interface of clinical genetics and genetics research.

MGEN–Q 626 Fundamentals of Biochemical and Molecular Genetics (1 cr.) Introduction to the concepts of molecular and biochemical genetics with emphasis on examples of pathogenesis of human disease.

MGEN–Q 627 Fundamentals of Human Cytogenetics (1 cr.) An introduction to the principles of human

cytogenetics with applications in basic genetics, including the clinical consequences of chromosomal abnormalities.

MGEN–Q 628 Fundamentals of Population Genetics (1 cr.) Introduction to the broad areas of population genetics and gene discovery.

MGEN–Q 630 Population Genetics (3 cr.) P: Basic genetics. Basic probability and Bayes theorem, as applied to genetic counseling. Effects of mutation and selection on the survival of alleles in a population; consequences of consanguinity and inbreeding; methods of analysis including segregation and linkage including nonparametric methods; quantitative genetics such as twin studies, and heritability.

MGEN–Q 631 Quantitative Genetics (2 cr.) P: G651 and G652 or equivalent. (Currently inactive.) Inheritance of human quantitative traits, partitioning of phenotypic variation, estimation of genetic variance and heritability, methods of analyzing resemblance among relatives including nuclear families, twins, and half-siblings.

MGEN–Q 640 Special Topics in Human Genetics (1–3 cr.; max. 9 cr.) A continuing, nonrepeating series of lectures on newer advances in human genetics; discussions in specific areas of human genetics not currently available to all students. Additional credits may be obtained by study of a specific area under individual tutelage.

MGEN–Q 640 Special Topics in Human Genetics: Dysmorphology (1 cr.) P: Consent of instructor. Study of human congenital malformations, deformations, disruptions and dysplasias; review of associated syndromes; approach to dysmorphology evaluation.

MGEN–Q 640 Special Topics in Human Genetics: Embryology (1 cr.) P: Consent of instructor. Normal human conception and embryonic/fetal development and factors causing birth defects.

MGEN–Q 640 Special Topics in Human Genetics: Practical Cancer Genetic Counseling (1 cr.) P: Q606, consent of instructor. Overview of hereditary cancer syndromes, counseling approaches, and testing issues.

MGEN–Q 640 Special Topics in Human Genetics: Genetic Counseling Communication Techniques (3 cr.) Genetic counseling models, methods and communication skills; professional issues related to client interactions. Practice-based learning through role play and other class interactions.

MGEN–Q 640 Special Topics in Human Genetics: Clinical Management and Genetics of Metabolic Disease (1 cr.) The student will gain a practical understanding of inborn errors of metabolism, the management of patients with these diseases and the genetic counseling issues that arise in the care of families with these diseases.

MGEN–Q 640 Special Topics in Human Genetics: Concepts of Genetics (3 cr.) (Currently inactive.) This course offers a unique perspective by tracing the intellectual path leading to current concepts in molecular, developmental, population, and medical genetics.

MGEN–Q 642 Dermatoglyphics (2 cr.) P: Consent of instructor. (Currently inactive.) Formation, development, classification and variation of finger, palm, and footprint patterns (dermatoglyphics) in humans; interpretation of results of quantitative and statistical techniques utilized in the study of the inheritance of dermatoglyphic traits, variation in twins, and applications in clinical genetics.

MGEN–Q 660 Medical Genetics Seminar (2 cr.) P: Basic genetics. Topics chosen from aspects of medical genetics not extensively treated elsewhere. Various phases of research in medicine from a genetic and clinical point of view. Students may receive credit during each semester of residence on the Medical Center campus.

MGEN–Q 730 Methods in Human Genetics (3 cr.) P: Basic genetics, differential calculus, and Q630 or equivalent. Sampling methods employed in study of human genetics; methods for analysis of segregation, linkage, mutation, and selection with family data collected under various forms of ascertainment.

MGEN–Q 800 Medical Genetics Research (arr. cr.)

Graduate

MGEN–G 504 Introduction to Research Ethics (2 cr.) Introduction to the basic concepts of research ethics. The course will cover historical development of concern with ethics in science as well as practical information needed by students working in the science today. Format will be lecture and discussion.

MGEN–G 651 Introduction to Biostatistics I (3 cr.) Data description, sampling variation and distributions, interval estimation, and tests of hypotheses involving binomial, normal, t, F, and X2 distribution; one-way analysis of variance, bivariate regression and correlation, higher order experimental designs, and associated analysis of variance; use of statistical analysis programs on computer.

MGEN–G 652 Introduction to Biostatistics II (3 cr.) Data description, sampling variation and distributions, interval estimation, and tests of hypotheses involving binomial, normal, t, F, and X2 distribution; one-way analysis of variance, bivariate regression and correlation, higher order experimental designs, and associated analysis of variance; use of statistical analysis programs on computer.

MGEN–G 724 Molecular Cancer Genetics (1 cr.) An introduction to cancer focusing on genetics. Topics include causes and effects of chromosome instability (including centromere/telomere failures and chromosomal translocations), epigenetic changes and genetic risk factors during cancer progression.

MGEN–G 725 Gene Transfer Approaches to Clinical and Basic Research (Gene Therapy) (1 cr.) A lecture-based course of basic principles involved with the transfer and expression of genetic material. Focus on technical aspects of each vector system, followed by applications to human diseases/experimental animal models. Practical understanding of non-viral and viral gene transfer to utilize these techniques in research studies.

MGEN–G 726 Developmental Genetics (1 cr.) This introductory course focuses on the genetic basis of mouse development. It covers the principles of embryogenesis and explores the mechanism of morphogenic signaling and transcriptional control of body plan and tissue differentiation. Special emphasis will be placed on the

role of developmental genetics in understanding human disease.

MGEN–G 727 Animal Models of Human Disease (1 cr.) This class explores advantages and limitations of animal models of human disease. Topics include models for diabetes, psychiatric disorders, cancer, osteoporosis, polycystic kidney and cardiovascular disease. The goal of the course is to provide a framework for students to select experimental animal models in their future research careers.

MGEN–G 746 Chromosome Instability and Disease (1 cr.) Exploration of the mechanisms of chromosome instability and the clinical impact of this problem. Topics will include chromosome structure and function and how failures in these functions promote chromosome instability in meiosis and mitosis. Other topics include the clinical consequences of chromosome instability in miscarriage, birth defects, and cancer. Note: This course is currently not being offered.

MGEN–G 901 Advanced Research (6 cr.) For Ph.D. students who have at least 90 credit hours.

Medical Neuroscience

School of Medicine

Departmental E-mail: chingtge@iupui.edu

Departmental URL: snri.iusm.iu.edu/body.cfm?id=29

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy.

Special Program Requirements

(See also general University Graduate School requirements.)

Bachelor's degree in chemistry, biological sciences, physics, mathematics, engineering, or psychology, which includes courses in general chemistry (8 credit hours), organic chemistry (8 credit hours), physics (4 credit hours), biological sciences (8 credit hours), and mathematics through calculus. Promising students may be accepted even though certain undergraduate prerequisites may be lacking, but they must remove deficiencies during the first year of graduate study. The Graduate Record Examination General Test results must be available before applicants will be considered for admission.

Master of Science Degree

Course Requirements

A total of 30 credit hours, including at least 17 credit hours of approved courses and 3 credit hours of research.

Thesis

Required.

Final Examination

Comprehensive oral examination.

Doctor of Philosophy Degree

Course Requirements

A total of 90 credit hours, including dissertation. A minimum of 34 credit hours must be in course work, the remainder in research.

Minor

Twelve (12) credit hours must be taken in one of the basic sciences associated with the Medical Neurobiology Program: anatomy, biochemistry, biology, medical genetics, microbiology and immunology, pathology, pharmacology, physiology and biophysics, and psychology. The minor can also be fulfilled by taking G715, G716, and G717.

Qualifying Examination

Written and oral.

Final Examination

Oral defense of dissertation.

Core courses include N800, N801, N802, N612, G743, N614, G744, N616, G745, D527. Additional appropriate courses in the Departments of Anatomy, Biochemistry, Biology, Medical Genetics, Microbiology and Immunology, Pathology, Pharmacology and Toxicology, Physiology and Biophysics, and Psychology will be accepted for credit toward the major with prior approval of the student's advisor.

Faculty

Program Director

Professor Cynthia Hingtgen*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Bernardino Ghetti* (Medical and Molecular Genetics, Neurobiology, Pathology, Psychiatry)

Chancellor's Professors

Tatiana Foroud* (Medical and Molecular Genetics), Janice C. Froehlich* (Medicine, Cellular and Integrative Physiology), Joseph DiMicco* (Pharmacology and Toxicology)

Albert Eugene Sterne Professor

Christopher McDougle* (Psychiatry)

Raymond E. Houk Professor of Psychiatry

Anantha Shekhar* (Neurobiology, Pharmacology and Toxicology)

Joyce and Iver Small Professor of Psychiatry, Neurobiology, and Medical Genetics

John Nurnberger Jr.* (Neurobiology, Psychiatry)

Paul Stark Professor of Pharmacology

Michael Vasko* (Pharmacology and Toxicology)

Showalter Professor

Grant Nicol* (Pharmacology and Toxicology)

Mari Hulman George Professor

Xiao Ming Xu (Neurological Surgery)

Raymond C. Beeler Professor of Radiology

Andrew Saykin (Radiology)

V.K. Stoelting Professor of Anesthesia

Fletcher White (Anesthesia, Pharmacology and Toxicology)

Professors

Charles Goodlett* (Psychology), Joseph Hingtgen* (Emeritus, Clinical Psychology, Neurobiology in Psychiatry), Debomoy Lahiri* (Psychiatry, Medical and Molecular Genetics), William McBride* (Biochemistry and Molecular Biology, Neurobiology in Psychiatry), James Murphy* (Neurobiology, Psychology), Sean O'Connor* (Psychiatry), Gerry Oxford* (Stark Neuroscience Research Institute, Pharmacology and Toxicology), Simon Rhodes* (Cellular and Integrative Physiology, Pharmacology and Toxicology), Jay Simon* (Psychiatry, Biochemistry and Molecular Biology), David Suzuki* (Ophthalmology, Anatomy and Cell Biology), Zao C. Xu* (Anatomy and Cell Biology), Feng Zhou* (Anatomy and Cell Biology)

Associate Professors

Ellen A.G. Chernoff* (Biology), Theodore Cummins* (Pharmacology and Toxicology), Nicholas J. Grahame* (Psychology), Eri Hashino* (Otolaryngology, Anatomy and Cell Biology), Cynthia Hingtgen* (Neurology, Pharmacology and Toxicology), David Kareken* (Neurology, Neuropsychology), Michael Kubek* (Anatomy and Cell Biology), Wei-Hua Lee* (Pediatrics, Anatomy and Cell Biology), Aimee Mayeda* (Psychiatry), Richard Nass (Pharmacology and Toxicology), John H. Schild (Biomedical Engineering), Debbie Thurmond* (Biochemistry and Molecular Biology), Frederick Unverzagt (Psychology), Ruben Vidal* (Pathology and Laboratory Medicine), Donald Wong* (Anatomy and Cell Biology)

Assistant Professors

Nikolai Broustovetski* (Pharmacology and Toxicology), R. Andrew Chambers (Psychiatry), Jinhui Chen (Neurological Surgery), Cristine Czachowski (Psychiatry, Psychology), Yansheng Du* (Neurology), Andy Hudmon* (Biochemistry and Molecular Biology), Rajesh Khanna* (Pharmacology and Toxicology), Xiaoming Jin (Anatomy and Cell Biology), Brenna McDonald (Radiology, Neurology), Samy Meroueh* (Biochemistry and Molecular Biology), Alexander B. Niculescu III (Psychiatry), Alexander Obukhov (Cellular and Integrative Physiology), Leonid Rubchinsky (Mathematical Sciences), Karmen Yoder (Radiology), Xin Zhang (Medical and Molecular Genetics)

Associate Research Professor

Sandra Morzorati* (Neurobiology)

Assistant Research Professor

Richard J. Thielen (Neurobiology, Biochemistry and Molecular Biology)

Graduate Advisor

Professor Cynthia Hingtgen*, R2 466, (317)278-9344

Courses

NEUR–N 612 Fundamental Neuroscience—Neurotransmitter Dynamics and Synaptic Plasticity (2 cr.) P: Consent of Instructor. A lecture/discussion course to explore the fundamental mechanisms involved in transmitter synthesis, release, storage, reuptake and general metabolism. Molecular mechanisms of synaptic plasticity as well as facilitation and depression of synaptic strength will also be explored.

NEUR–N 614 Fundamental Neuroscience—Special Senses and Integrative Neurophysiology (2 cr.) P: Consent of Instructor. A lecture/discussion course to explore fundamental concepts and mechanisms related to various sensory receptors (photo receptors, hair cells), spinal reflex circuits, central pattern generators, and the visual system as a complex integrative model.

NEUR–N 616 Fundamental Neuroscience—Developmental Biology of Neuroscience (2 cr.) P: Consent of Instructor. A lecture/discussion course to explore concepts in basic neuroembryology including examination of molecular cures for axial patterning, axonal pathfinding and growth, developmental regulation of gene transcription, neural stem cells and glia; cell precursors, and regionalization of nervous system function.

NEUR–N 800 Research in Medical Neurobiology (arr cr.) P: Consent of instructor with whom research is being done. Supervised literature and laboratory research in selected area(s) of medical neurobiology.

NEUR–N 801 Seminar: Topics in Medical Neurobiology (1 cr.) Required of all graduate students in program. Recent topics in medical neurobiology covered by literature and research reports and discussions by faculty, graduate students, and invited guest lecturers.

NEUR–N 802 Techniques of Effective Grant Writing (3 cr.) The grantsmanship course is designed to teach graduate students how to write an NIH application and to provide information on the review process. Students will complete an NIH R03 application by the end of the semester. All students will participate in a mock IRG-style review of each application at the end of the course.

Anatomy

ANAT–D 527 Neuroanatomy (3 cr.)

ANAT–D 863 Peripheral Nervous System (2–3 cr.)

ANAT–D 875 Topics in Advanced Neuroanatomy (2–5 cr.)

ANAT–D 876 Neurotransmitter and Neuroendocrine Cytology and Anatomy (3 cr.)

Biochemistry

BIOC–B 500 Introductory Biochemistry (3 cr.)

BIOC–B 835 Neurochemistry (3 cr.)

BIOC–B 836 Advanced Topics in Neurochemistry (3 cr.)

Graduate

GRAD–G 743 Fundamentals of Electrical Signaling and Ion Channel Biology (1 cr.) Experimental basis for cellular and molecular concepts of electrical excitability and membrane transport through ion channels. The goals are to foster an understanding of how we accumulate information and to provide students with tools to evaluate hypotheses and to define unanswered questions, rather than provide current “facts” to memorize.

GRAD–G 744 Neuropharmacology of Synaptic Transmission: Receptors and Ligands (1 cr.) Experimental basis for current cellular and molecular concepts of postsynaptic receptors and signals involved in chemical synaptic transmission in the nervous system. The goals are to foster an understanding of how we accumulate information and to provide students with tools to evaluate hypotheses and to define unanswered questions, rather than provide current “facts” to memorize.

GRAD–G 745 Fundamentals of Intracellular Signal Transduction in Neurons (1 cr.) Experimental basis for cellular and molecular concepts of intracellular signaling cascades attending neurotransmitter, growth factor, and cytokine receptor activation in neurons. The goals are to foster an understanding of how we accumulate information and to provide students with tools to evaluate hypotheses and to define unanswered questions, rather than provide current “facts” to memorize.

GRAD–G 865 Fundamental Molecular Biology (3 cr.) P: B800 or equivalent. Principles of molecular structure, function, and biosynthesis; core information regarding prokaryotic and eukaryotic gene continuity and metabolic coordination; introduction to multicellular systems and problems.

Pharmacology and Toxicology

PCTX–F 602 Pharmacology: Lecture (5 cr.)

Physiology and Biophysics

PHSL–F 613 Mammalian Physiology Lecture (5 cr.)

Microbiology and Immunology

School of Medicine

Departmental E-mail: hbroxmey@iupui.edu

Departmental URL: http://www.micro.medicine.iu.edu/

Curriculum

Degrees Offered

Master of Science and Doctor of Philosophy

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

The Graduate Record Examination General Test is required. For the Ph.D.: see IBMS requirements. For the Master of Science degree: undergraduate courses in basic biology, including cell biology and genetics; general and organic chemistry; physics; mathematics, including calculus. Biochemistry is recommended. Deficiencies should be removed during the first year of enrollment. Overall grade point average of at least 3.0 (B).

Master of Science Degree

Course Requirements At least 30 credit hours, including at least 5 credits from among these courses: G715 Biomed I – Biomedical Science I – Biochemical Basis of Biological Processes (3 cr.), G716 Biomed II – Biomedical Science II – Molecular Biology and Genetics (3 cr.), G717 Biomed III – Biomedical Science III – Cellular Basis of Systems Biology (3 cr.) or G817 Molecular Basis of Cell Structure and Function (2 cr.); at least 4 credits from these courses: G729 Introduction to Immunological Systems (1 cr.), G728 Fundamental Concepts of Infection and Pathogenesis (1 cr.), G852 Concepts of Cancer Biology (2 cr.), G720 Stem Cell Biology (1 cr.), J807 Current Topics in Immunology (2 cr.), J829 Current Topics in Microorganisms (2 cr.), J842 Neoplastic Determinants (2 cr.); plus J802 Introduction to Research (2-8 week rotations: one fall, one spring) (2 cr.), G655 Skills - Research Communications Seminar (1 cr.), G855 Skills – Experimental Design and Biostatistics (1 cr.), G505 Responsible Conduct of Research (1cr.), J810 Thesis Research (16 cr.). At least 14 non-thesis credits and 16 thesis credits. Also attend the weekly departmental seminar series, as well as attend and, in their second year present, at the weekly Departmental Research in Progress (RIP); encouraged to attend a journal club in their area of interest.

Grades

An overall average of at least a B (3.0). Only 3 credits of C (2.0) can be counted toward the required credits of didactic coursework.

Comprehensive Examination

Required at completion of second semester of study.

Thesis

Required (a minimum of 16 cr of J810.

Final Examination

Oral Defense of thesis.

Doctor of Philosophy Degree

Focus Areas

The major focus areas are immunology, pathogenesis, and cancer. Students entering the program may design a course of study from one of these areas through a combination of selected course work and research activities.

Course Requirements

A total of 90 credit hours, of which a minimum of 26 credit hours must be in courses other than research. In addition to 3 rotations (G718 Research in Biomedical Science, 6 cr.), each student will take at least 20 credits of coursework, including the 6 core courses (12 credits) required in the IBME curriculum (G715 Biomedical Science I – Biochemical Basis of Biological Processes [3 cr.], G716 Biomedical Science II – Molecular Biology and Genetics [3 cr.], G717 Biomedical Science III – Cellular Basis of Systems Biology [3 cr.], G655 Research Communications Seminar [1 cr.], G855 Experimental Design and Research Biostatistics [1 cr.], and G505 Responsible Conduct of Research [1 cr.]), and at least

3 courses (5 cr.) chosen from courses suggested within a focus area of Immunology, Pathogenesis, or Cancer: G729 Introduction to Immunological Systems (1 cr.), G728 Fundamental Concepts of Infection and Pathogenesis (1 cr.), G852 Concepts of Cancer Biology (2 cr.), G720 Stem Cell Biology (1 cr.), J807 Current Topics in Immunology (2 cr.), J829 Current Topics in the Molecular Genetics of Microorganisms (2 cr.), and J842 Neoplastic Determinants (2 cr.).

Grades

Overall average of at least a B (3.0).

Minor

A minimum of 12 credit hours in a related field or in life science. These credits must be in lecture or laboratory courses other than research and must meet the requirements of the department in which the minor is taken. For the life sciences minor, a minimum of 6 credit hours must be obtained in one department.
Ph.D. Minor in Cellular and Molecular Biology of Biomedical Systems

A minimum of 12 credit hours of course work outside the student's major department, including G865 Fundamental Molecular Biology and either G817 Eukaryotic Cell Biology or F705 Molecular and Cellular Physiology (unless these are required by the major department). Since the minor is intended to expose the student to both cellular and molecular biology, at least one course (and preferably two) from each area should be taken. Courses for the minor must be selected from the following list and approved by the advisory committee, the minor representative of which will be selected from outside the student's major department. Courses: Anatomy D863, D866; Biochemistry B807, B810, G817, B841; Medical and Molecular Genetics Q612, Q620, Q622; Microbiology and Immunology J805, J821, J826, J828, J837, J838; Pharmacology and Toxicology F808, F832, F834, F835, F842, F843; Physiology and Biophysics F705, F710, F724, F765; Graduate G595, G865, G890.

Ph.D. Minor in Cancer Biology

A minimum of 12 credit hours outside of the student's major department, including two courses from the following list of five: Q622 Cytogenetics of Malignancies (2-3 cr.), F819 Chemical Carcinogenesis (3 cr.), J842 Neoplastic Determinants (2 cr.), G724 Molecular Cancer Genetics (1 cr.), G852 Concepts of Cancer: Signaling Gone Awry (2 cr.), G505 Responsible Conduct of Research must also be taken.

The remainder of the minor will be selected from the following courses: Graduate G715 Biomedical Science I–Biochemical Basis of Biological Processes; G716 Biomedical Science II–Molecular Biology and Genetics; G717 Biomedical Science III–Cellular Basis of Systems Biology; G720 Stem Cell Biology; G726 Developmental Genetics; G729 Immunology I–Introduction to the Immune System; GRAD-G737/ANAT-D851 Introduction to Histology/Histology; G748 Principles of Toxicology 1; G848 Bioinformatics, Genomics, Proteomics, and Systems Biology; G817 Molecular Basis of Cell Structure and Function; G749 Introduction to Structural Biology; G807 Structural and Chemical Biology; G837 Mammalian DNA Repair and Disease; G727 Animal Models of Human Disease; Medical and Molecular Genetics Q620 Human Cytogenetics; Q622 Cytogenetics of Malignancies; Microbiology and Immunology J807 Current Topics in Immunology; J829 Current Topics in Molecular Genetics of Microorganisms; J842 Neoplastic Determinants; Pharmacology and Toxicology F819 Chemical Carcinogenesis; F820 Cancer Chemoprevention.

The minor program must be approved by the student's Advisory Committee, which will take into consideration the student's total didactic experience. In the case of combined M.D./Ph.D. students, the Committee may approve substitution of appropriate medical school courses. The minor representative on this Committee will be selected from outside the student's major department and must be a member of the Cancer Biology Training Program.

Qualifying Examination

Within the first 25 months of studies (18 months for combined M.D./Ph.D.), the student submits a written research proposal in the form of a grant application to the advisory committee. At this time, the student has both a written examination based on course work and an oral examination based primarily on the written research proposal. The student can request an extension of four months from the faculty to take the qualifying examination. Doctoral studies are continued if the qualifying examination and other work, including research, are deemed satisfactory by the majority of the advisory and research committees.

Final Examination

Oral defense of the dissertation.

Other Provision

Submission of a manuscript based on the dissertation research for publication in a primary journal in the field required. Students will develop teaching skills as instructors in J210 during the first two years of graduate training, and additional teaching experiences can be arranged.

Faculty

Primary Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor

Hal E. Broxmeyer*

Chancellor's Professors

Janice S. Blum*, Ann Roman*

Professors

Randy Brutkiewicz *, Roman Dziarski*, Xin-Yuan Fu*, Roy W. Geib*, Johnny J. He*, Louis M. Pelus*, Robert H. Schloemer*

Associate Professors

Carla J. Aldrich, Alexander L. Dent*,Michael J. Klemsz*, Steven Larsen*, Glenn J. Merkel*, Martin L. Smith*, Warner Wegener* (Emeritus), Charles E. Wilde III*

Assistant Professors

Margaret E. Bauer*, Wilbert Derbigny, Xiaofeng Frank Yang, Andy Yu

Secondary Faculty

Professors

Byron Batteiger* (Medicine), Darron Brown* (Medicine), D. Wade Clapp* (Pediatrics), Kenneth Cornetta* (Medicine), Mary Dinauer* (Pediatrics), Kenneth Fife* (Medicine), Mark Kaplan* (Pediatrics), Mark Pescovitz* (Surgery), Stanley Spinola* (Medicine), Edward Srour* (Medicine), David Wilkes* (Medicine)

Associate Professors

Thomas Gardner* (Urology), Shreevrat Goenka * (Pediatrics), Laura Haneline (Medicine, Pediatrics), Mircea Ivan * (Medicine), Raymond M. Johnson (Medicine), Chinghai Kao (Urology), Reuben Kapur*, William Sullivan * (Pharmacology & Toxicology), Christopher Touloukian * (Surgery), Baohou Zhou * (Pediatrics)

Associate Scientist

Meei-Huey Jeng* (Medicine)

Courses

MICR–J 510 Infectious Microbes and Host Interactions (3 cr.) P: Graduate-level biochemistry. Emphasis on the molecular and cellular events which permit pathogenic bacteria and viruses to enter human cells and disrupt cell function while evading the host's immune system.

MICR–J 610 Medical Immunology (2 cr.) Introduction to natural and acquired immune mechanisms, with consideration of their significance to medicine. Topics will include both normal and abnormal immune processes, including recovery from and prevention of disease, immune-mediated pathological processes, tumor immunology, immunodeficiency, and auto-immunity. Designed to precede and complement J602 Medical Microbiology.

MICR–J 800 Advanced Microbiology (arr cr.) P: Consent of instructor. The approach to problems in microbiology, including the application of techniques of bacteriology, genetics, immunology, mycology, parasitology, virology, and zoology.

MICR–J 802 Introduction to Research (2 cr.) P: Consent of instructor. Laboratory research instruction in microbiology and immunology. Purpose is to introduce students to three different research programs in microbiology and/or immunology.

MICR–J 805 Molecular Immunology (3 cr.) P: B500 or equivalent; consent of instructor. Characterization of immunologically relevant molecules in terms of molecular genetics, synthesis and assembly, structure-function and evolutionary relationships, and functional roles in immune responses. Entities to be considered include members of the immunoglobulin superfamily and functionally associated molecules. Department is not currently offering this course.

MICR–J 806 Immunochemistry: Laboratory (arr cr.) P: J805. C. Antigen preparation; separation and purification of antibodies; modern methods of antibody determination and analysis. Department is not currently offering this course.

MICR–J 807 Current Topics in Immunology (2 cr.) P: Graduate standing, J805 or J840 or equivalent or consent of instructor. Discussion and review of current literature in selected topics in immunology. Emphasis on molecular and cellular events in lymphocyte activation and regulation. Topic varies from year to year.

MICR–J 810 Research in Microbiology (arr cr.) P: Consent of instructor. **Data obtained in this course may be used to meet the thesis requirements for graduate degrees. **These courses are eligible for a deferred grade.

MICR–J 821 Microbial Pathogenicity (3 cr.) P: Consent of instructor. This course will consider in detail the determinants of microbial virulence and the mechanisms of host responses to infection and how these two factors interact in the pathogenesis of infectious diseases. Department is not currently offering this course.

MICR–J 822 General and Medical Microbiology (3 cr.) Lectures covering the biology of various pathogenic organisms such as bacteria, viruses, fungi, and parasites, their role in human disease with emphasis on determinants of microbial virulence, the mechanisms of host responses to infection, and the role of these factors in the pathogenesis of disease.

MICR–J 826 Bacteriology (3 cr.) P: J601 or J822 or their equivalent and consent of instructor. General concepts of bacteriology. Department is not currently offering this course.

MICR–J 828 Virology: Lecture (3 cr.) P: BIOC B500 or equivalent and consent of instructor. Basic biological principles of viruses; agents causing diseases in animals, including humans; interactions of animal viruses with their host cells in tissue culture. Department is not currently offering this course.

MICR–J 829 Current Topics in Molecular Genetics of Microorganisms (2 cr.) P: Graduate standing, J821, J828 or G865, consent of instructor. In-depth study of a specific topic in contemporary molecular genetics of microorganisms.

MICR–J 830 Seminar in Microbiology (1 cr.) P: Consent of instructor. Provides students with background and practical experience in communication of their research. Department is not currently offering this course.

MICR–J 840 Mechanisms of Immune Regulation (2 cr.) P: Consent of instructor. A current overview of the cellular mechanisms which regulate immune responses. Topics include cells and cytokines involved in antigen presentation, lymphocyte activation and function, development, and tolerance. Department is not currently offering this course.

MICR–J 842 Neoplastic Determinants (2 cr.) P: G865, G817 or equivalent and consent of instructor. Focus on the genetic basis of the cancer phenotype. Consider effects of DNA sequence mutations; chromosomal rearrangements, and/or introduction of new genetic information on DNA repair, oncogene products and tumor suppressors. Intra- and intercellular consequences of these discrete alteractions will be included.

MICR–J 854 Hematopoiesis (2 cr.) P: G817, G865, and consent of the instructor. Principles of blood cell formation, including the regulation of production, biologic function, and cell culture and recombinant DNA technologies that contribute to our understanding. Stem cells, growth factors, cytokine involvement, gene transfer/gene therapy, and clinical applications. Department is not currently offering this course.

GRAD–G 504 Introduction to Research Ethics (2 cr.) Introduction to the basic concepts of research ethics. The course will cover historical development of concern with ethics in science as well as practical information needed by students working in the science today. Format will be lecture and discussion.

GRAD–G 505 Responsible Conduct of Research (1 cr.) An overview of the rules and standards required for anyone conducting responsible scientific research.

GRAD–G 720 Stem Cell Biology (2 cr.) This course will cover the self-renewal, proliferation, survival, differentiation, and migration/homing characteristics of hematopoietic and embryonic stem cells, how these functions are regulated by cytokines/chemokines and other external stimuli, and what their clinical capabilities are and might be.

GRAD–G 728 Fundamentals of Infection and Pathogenesis (1 cr.) This course will cover concepts of host-pathogen interactions, ranging from pathogen entry, growth, and spread in the host to pathogen-mediated injury, immune evasion, pathogen survival strategies, and transmission to new hosts. Basics of bacterial, viral, and parasitic structures will be considered as they relate to pathogenesis.

GRAD–G 729 Immunology I: Introduction to the Immune System (1 cr.) An introductory biomedical science, lecture-based, core course intended for all incoming basic science graduate doctoral students in the School of Medicine programs or other interested graduate students. The course will cover components of the immune system, development of the immune system, the immune response to pathogens, and immunological disease.

GRAD–G 817 Molecular Basis of Cell Structure and Function (2 cr.) Organization and function of subcellular structures. Intracellular coordination of cell activities including: protein and RNA processing/trafficking/quality control, chromatin dynamics, and cell division.

GRAD–G 837 Mammalian DNA Repair and Disease (3 cr.) P: Consent of instructor. The molecular biology of genetic repair and mutation; emphasis on human systems and human disease states related to DNA repair; mechanisms of DNA repair and regulation of DNA repair in mammalian cells.

GRAD–G 852 Concepts of Cancer Biology: Signaling Gone Awry (2 cr.) P: Completion of the BioMed I, II, and III courses (G715, G716, G717) or consent of instructor. Fundamentals of cancer biology; the signaling of events that regulate cell growth, survival and differentiation; how mutation/dysregulation of signaling molecules leads to cancer and might be exploited for treatment. Department is not currently offering this course.

GRAD–G 865 Fundamental Molecular Biology (3 cr.) P: B800 or equivalent. Principles of molecular structure, function, and biosynthesis; core information regarding prokaryotic and eukaryotic gene continuity and metabolic coordination; introduction to multicellular systems and problems.

Museum Studies

School of Liberal Arts

Departmental E-mail: museum@iupui.edu

Departmental URL: liberalarts.iupui.edu/mstd/

Curriculum

Museum Studies Program

The Museum Studies Program provides an integration of museum history and theory with hands-on instruction in museum techniques and practices. It encompasses the scholarly exploration of museums, including their history, operations, ethics and role in society from interdisciplinary perspectives, while also training students in the technical aspects of museum work such as collections care and management, administration, education, exhibit planning and design, curatorial practices, visitor studies and technology.

As an urban university, IUPUI is part of a community with a rich heritage of museums and cultural arts. Faculty appointed as Public Scholars of Civic Engagement craft relationships and sustainable partnerships with area museums and cultural institutions and involve undergraduate and graduate students in meaningful ways in those collaborations. The Museum Studies Program has an extensive network of adjunct faculty and guest lecturers who bring state-of-the-art museum practice to the curriculum. The program also offers opportunities for student learning through the resources of the museum community with experiences such as internships; collaboration on exhibit development and design; exhibition- and collections-focused projects; collections research; collaboration with faculty on museum research projects; and participation in museum-sponsored seminars, lectures, and professional meetings. The integral role of Indianapolis museums in the Museum Studies curriculum fosters a critical, reflective, and scholarly discourse on museums that is applied to current practices and issues in the field.

The program offers a master’s degree and both an undergraduate and a graduate certificate. Students considering application to the certificate or degree program are welcome in the classes. Students admitted to the graduate program may apply to count credits earned as a non-degree student toward their graduate credential (up to 6 credits toward the graduate certificate and up to 8 credits toward the Master's degree). Please see the Web site for admissions deadlines and current course offerings.

Graduate Certificate in Museum Studies

The Graduate Certificate in Museum Studies (18 credit hours) provides students with interdisciplinary training in museum practice and a knowledge of contemporary issues in the museum field. It trains students in specialized aspects of museum practice such as education, exhibit planning and design, collections care, curatorial practices, philanthropy, and nonprofit management by combining Museum Studies course work with curriculum in other

IU schools (e.g., Public History, Philanthropic Studies, Education, SPEA, Library Science). Students are given an introduction to the history and philosophy of museums and an opportunity to focus on particular aspects of museum practice.

The Graduate Certificate may be taken as a freestanding credential or paired with graduate work in another related discipline. Because it offers an opportunity to focus on specific areas of museum practice, the graduate certificate is also a suitable credential for current museum professionals who wish to enhance their professional training or develop new specialties. For specific requirements and options for cross-listed courses, see the Museum Studies web site or meet with an academic advisor.

Master's Degree

The Museum Studies M.A. curriculum (36 credit hours) consists of a required introductory course, a set of integrated core courses which provide a broad-based interdisciplinary training in museum practice, a choice of elective courses that allow the student to develop a particular specialty, and a capstone colloquium course preparing students for entry into the museum workforce. The course work is complemented by an internship that provides an opportunity for an intensive applied learning experience in a museum. The interdisciplinary curriculum and flexible structure allow students to achieve either a generalist breadth suitable for those working in smaller museums or to focus on a particular area of museum practice appropriate for a specialist on the staff of a larger museum.

Team-based and applied projects form a core learning experience in all classes and present opportunities to work with community partners as well as peers in the program. Team projects such as exhibit development and visitor studies prepare students for the collaborative approach that is central to the museum field.

Course Requirements

The Museum Studies Graduate Certificate consists of 18 credit hours of course work, including a required introductory course (3 cr.), an internship (3 cr.), two core courses (6 cr.), and a choice of two additional courses (6 cr.) from a list of museum studies courses. The master's degree program consists of 36 credit hours of course work, including a required introductory course (3 cr.), four core courses (12 cr.), an internship (6 cr.), a colloquium (3 cr.), and a choice of four courses from the electives (12 cr.) All these courses must be passed with a grade of B– or above in order to count for the certificate or the degree. Internships must be approved by a faculty advisor prior to registration.

All students should file a curriculum plan with the Museum Studies office before the end of their first semester.

Graduate Certificate requirements (18 cr.)

- MSTD A503 Introduction to Museum Studies (3 cr.)
- MSTD A508 Museum Internship (3 cr.)
- Core courses (6 cr.)
- Elective (6 cr.)

M.A. requirements (36 cr.)

- MSTD A503 Introduction to Museum Studies (3 cr.)
- MSTD A508 Museum Internship (6 cr.)
- MSTD A530 Museum Colloquium (3 cr.)
- Core courses (12 cr.)
- Electives (12 cr.)

Faculty

Director

Associate Professor Elizabeth Kryder-Reid (Anthropology, Museum Studies)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Debra Mesch* (School of Public and Environmental Affairs), Jean Robertson (Art History), Philip Scarpino (History), Susan Sutton* (Anthropology), Larry Zimmerman (Museum Studies and Anthropology)

Associate Professors

Jeanette Dickerson-Putman* (Anthropology), Owen Dwyer (Geography), Elizabeth Kryder-Reid (Museum Studies, Anthropology), Elizabeth Brand Monroe (History), Paul Mullins (Anthropology), Kevin Robbins (History), Robert Sutton (Classical Studies), Christopher Vice (Herron School of Art and Design, Visual Communication, Museum Studies)

Assistant Professors

Matthew Groshek (Museum Studies, Herron School of Art, Design, Visual Communication), Youngbok Hong (Herron School of Art and Design, Visual Communication), Modupe Labode (Museum Studies, History), Jennifer Lee (Herron School of Art and Design, Fine Arts,), Jennifer Mikulay (Museum Studies, Herron School of Art and Design, Fine Arts), Elizabeth Wood (Museum Studies, Education)

Academic Advisor

Associate Professor Elizabeth Kryder-Reid, Cavanaugh Hall 419, (317) 274-1490

Courses

MSTD–A 503 Introduction to Museum Studies (3 cr.) This survey of museology introduces students to the history of museums and to debates on the philosophical nature of museums and their roles in society. The course covers the types and definitions of museums, traces the history of museums, discusses contemporary museum practice and examines current issues in the museum profession.

MSTD–A 505 Museum Methods (3 cr.) This survey of museum practice introduces students to methods, skills, and resources in three areas of museum work: artifacts, interpretation, and organizational administration, as well as to the ethical ramifications of these methods (course does not count toward the Master's degree, but it does count toward the graduate certificate).

MSTD–A 508 Museum Internship (1–6 cr.) P: A503 and two other museum studies graduate courses or consent of the instructor. An arranged learning experience in

museum work appropriate to individual career goals, focusing on an aspect of museum practice and working with a museum mentor.

MSTD–A 510 Museum Education (3 cr.) P: A503 or consent of instructor. This survey of museum education introduces students to a variety of professional skills through exercises, projects, museum visitor observation, and in-museum classes. It covers education theory most central to museum practice, the duties of museum educators, and current issues in museum education. (Core course)

MSTD–A 512 Exhibit Planning and Design (3 cr.) P: A503 or consent of instructor. This course offers a survey of museum exhibit planning and design through an integration of theory and practice. The class introduces students to exhibit development, including exhibit administration, design, and evaluation, and to a variety of professional skills through hands-on exercises, exhibit critiques, museum observations, and in-museum classes. (Core course)

MSTD–A 514 Museums and Technology (3 cr.) P: A503 or consent of instructor. This course surveys the growing use of technology in museums. It examines applications for information management in collections, conservation science, and archives. It examines critically the use of technology in the service of education both in exhibit contexts and in the variety of educational programs and Web-based dissemination of knowledge.

MSTD–A 516 Collections Care and Management (3 cr.) P: A503 or consent of instructor. A survey of techniques for the management and care of collections in museums. It covers documentation, management of collections, processes, administrative functions, risk management, and ethical and legal issues. The course also covers the physical care and conservation of collections. (Core course)

MSTD–A 518 Museums and Audiences (3 cr.) P: A503 or consent of instructor. This course examines the ways museums seek to better understand their audiences, serve them more effectively, and strive to reach new audiences. The course looks at a broad range of visitor studies and the ways in which museums and audiences interact.

MSTD–A 530 Museum Colloquium (3 cr.) This course provides graduate students with the tools and knowledge necessary to assess, understand, and utilize the links among their education, goals, and museum career opportunities.

MSTD–A 548 Museum Administration (3 cr.) This course presents an overview of issues faced by administrators and mid-level managers who work in museums, historical societies, archives, special collection libraries, and other cultural resource agencies. Topics, speakers, and readings are focused on issues that are unique to agencies that collect, preserve, and interpret cultural resources. (Core course)

MSTD–A 560 Current Topics in Museum Studies (3–9 cr.) Intensive graduate-level study and analysis of selected topics in museum studies. Topics will vary from semester to semester. Includes topical courses such as Museum Theatre, Curatorial Practices, Museum Communication Strategies, Museums and Sustainability, Museum Ethics, Museums and Indigenous People, African-American Museums, Archaeological Curation.

MSTD–A 595 Independent Learning in Museum Studies (1–9 cr.) A supervised, in-depth examination through individual reading and research on a particular Museum Studies topic selected and conducted by the student in consultation with a faculty member.

Nursing

School of Nursing

Departmental E-mail: nursing@iupui.edu

Departmental URL: http://nursing.iupui.edu/

Curriculum

Program Information

The Doctor of Philosophy (Ph.D. degree) is offered through the University Graduate School. In addition, the School of Nursing offers a Master of Nursing Science (M.S.N. degree). See the School of Nursing Graduate Program Bulletin.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Doctor of Philosophy Degree

The Doctor of Philosophy in Nursing Program, consistent with the school's mission, prepares graduates to be nurse scientists who are competent in both the generation and dissemination of new knowledge for use in clinical practice, teaching, and administration.

The Ph.D. program encompasses a wide scope of scientific inquiry including clinical research, health systems research, and nursing education research. Clinical research, based on biological, behavioral, and other types of investigations, provides the scientific basis for the care of individuals across the lifespan, families, and/or communities. Health systems research examines ways to improve health outcomes in complex systems including those related to the availability, quality, and costs of health care services. Nursing education research focuses on how students learn professional practice as well as strategies to improve educational processes and outcomes in the preparation of clinicians, nurse educators, nurse administrators, and scientists using traditional and innovative teaching strategies.

On-Campus and Distance-Accessible Ph.D. Options

Indiana University School of Nursing (IUSON) offers distance-accessible courses. The distance-accessible option offers BSN and MSN nurses access to our Ph.D. program through a variety of distance technologies. Faculty and students use Web-based courses, video conferencing, listserv dialogues, telephone conferencing, and other emerging technologies to communicate effectively via long distance. Online courses and faculty mentoring are coupled with required on-campus summer sessions for all students. Admission criteria and curriculum are the same for on campus or distance accessible options.

Focus Areas of Study with Wide Application

Students who pursue the Ph.D. in Nursing Science choose one of two sub-plans or focus areas. The two focus areas are Clinical Nursing Science and Health Systems. Doctoral students work closely with faculty mentors utilizing the resources available at the Indiana University School of Nursing and participate in intensive research studies. Focus areas reflect faculty research strengths.

Clinical Nursing Science

Clinical Nursing Science concentrates on the interrelationships of health promotion, health behavior and quality of life in acute and chronic illness throughout the lifespan. This focus area includes the prevention and early detection of disabilities across the continuum of care and the enhancement of the health and well-being for individuals, families and communities.

Examples of scholarship and faculty research within the focus area of Clinical Nursing Science include:

- Family adaptation to chronic illness
- Improving quality of life in persons with chronic illness, including epilepsy and renal disease
- Behavioral oncology across the cancer continuum (including cancer prevention, detection, and symptom management)
- Improving quality of life in patients with cardiovascular disease, particularly heart failure
- Tailored intervention studies to improve quality of life
- Patient care safety
- Childhood adaptation to chronic illness

Health Systems

Health Systems operate to create structures and resources that enable individuals and communities to achieve optimal health. This focus area includes the science of nursing education, informatics, health policy, and administration.

Examples of scholarship and faculty research within the focus area of Health Systems include:

- Teaching and learning in nursing education and practice

Narrative and other innovative pedagogies

- Patient care simulations
- Clinical Reasoning Reflective Practice
- Health Systems Research
- Assessment of learning and program evaluation
- Health policy and public policy analysis
- Computer systems to enhance care delivery
- Nursing informatics
- Community-based care coordination

Admission Requirements

Successful applicants must meet the following criteria and submit online Graduate School ApplyYourself (AY) applications by October 15 for summer admission:

- Completion of a Bachelor of Science in nursing or Master of Science in Nursing from a program within a regionally accredited institution of higher education. (Indiana University School of Nursing faculty retain the right to determine acceptable accreditation status of nursing programs from which applicants have graduated.)
- A baccalaureate cumulative grade point average of 3.0 on a 4.0 scale. For applicants holding a Master's degree, a graduate GPA of 3.5 or higher is required. (The master's degree GPA will supersede the baccalaureate GPA.)
- Completion of a 3-credit-hour graduate level statistics course with a grade of B (3.0) or higher within three years before the date of proposed enrollment.
- Current, active, unencumbered Registered Nurse licensure (RN) in state of US residence.
- Competitive scores (upper 50th percentile recommended) on the verbal and quantitative sections and a score of 3.5 or higher on the analytical writing section of the Graduate Record Examination (taken within five years before the date of proposed enrollment).
- Official college transcripts, in English, from each college or university you have attended since high school. A transcript that shows transfer credits is only official for credits taken at that institution—it is not an official transcript for the transferred credits.
- Demonstration of successful English by competitive scores (550 or higher) on the Test of English as a Foreign Language (TOEFL) for students whose first language is not English. Also required is satisfactory performance on the International English Language Testing System (IELTS) examination or internet-based TOEFL test (IBT). (The School of Nursing accepts the score established by the Office of International Affairs.)
- A two- to three-page essay summarizing a research interest area and immediate and long-term professional goals.
- Example of original scholarship or research in nursing a demonstrated by a report, published or unpublished paper, or a thesis.
- A current resume or curriculum vitae, including descriptions of the position and clinical setting of current employment, list of current responsibilities, dates of employment, and information on former employment history. Also include involvement in professional and voluntary organizations; any awards, honors; publications written and published; presentations given; and continuing educational experiences.
- Three references, including one from a nurse faculty member who has knowledge of the applicant's academic ability from undergraduate or master's work.
- A letter of support from a nursing faculty member of the Indiana University School of Nursing with graduate faculty status who has agreed to be a preliminary research mentor.
- An interview with members of the graduate faculty (arranged by the School of Nursing for qualified applicants).
- Complete at least two Departmental Questions in the ApplyYourself (AY) application
- International students must be processed through the office of International Affairs, OIA, International students must provide evidence of passing the

CGFNS exam (Council of Graduates of Foreign Nursing).

Opportunities for Financial Aid

Information about financial resources for doctoral nursing students concerning traineeships, fellowships, and research teaching assistantships, as well as scholarships providing monetary compensation for tuition, fees, and health insurance may be obtained from the Indiana University School of Nursing's Center for Academic Affairs, or by visiting our Web site at http://www.nursing.iupui.edu/. Current and previous students have been successful in securing funding for their doctoral education from:

- Research Training Grants and Fellowships
- Nurse Faculty Loan Program
- The American Organization of Nurse Executives
- The National Institute of Nursing Research
- The Mary Margaret Walter Program for Cancer Care Research
- The American Cancer Society
- The Oncology Nursing Foundation

Students interested in financial aid should consult with the Office of Student Financial Aid Services: http:www.iupui.edu/~finaid/.

In addition, a number of nursing scholarships are available to IU School of Nursing students, awarded on an annual basis. Scholarships are awarded on the basis of the availability of funds in each scholarship account. The amount of each scholarship may vary from year to year and, furthermore, if adequate funds are not available, some scholarships may not be awarded every year.

All scholarship applications are reviewed and recipients selected by the Scholarship Committee of the School of Nursing.

Scholarship application forms and further information may be obtained on the IUSON website in late January and again in the late summer or early fall: http://nursing.iupui.edu/cost/grad.shtml .

Curriculum Concentrations

The Ph.D. curriculum consists of six core areas totaling 90 credit hours. Up to 30 of these credit hours may be met by Master of Science course work.

1. Professional Development Core (6 cr.)
2. Nursing Theory Core (9 cr.)
3. Research and Methods Core (21-30 cr.)
4. Nursing Major Core in a Focus Area (24 cr.)
5. Minor (external or internal) (9-12 cr.)
6. Dissertation (including 3 cr. Dissertation Seminar) (16 cr.)

Total: 90 credits, minimum

Professional Development Core: (6 credits)

- D602 Responsible Conduct of Research (1 cr.)
- D701 Nursing Inquiry and Scholarship: Introduction to Doctoral Study (3 cr.)
- T800 Preparing Future Faculty (2 cr.)

Nursing Theory Core: (9 credits)

- D607 Nursing: Theory II (3 cr.)
- D608 Mid-Range Theory Development for Nursing (3 cr.)Research and Methods Core: (21-30 credits)
- N502 Nursing Theory I (3 cr.)
- R500 Nursing Research Methods I (3 cr.)
- R601 Instrumentation and Measurement (3 cr.)
- R603 Foundations of Research Design and Methods (3 cr.)
- R604 Experimental and Quasi Experimental Designs and Methods (3 cr.)
- R605 Advanced Research Design and Interventions in Nursing (3 cr.)
- R607 Advanced Statistics in Nursing Research (or equivalent) (3 cr.)
- R608 Multivariate Statistics in Nursing Research (or equivalent) (3 cr.)
- R610 Qualitative Inquiry and Research methods (3 cr.)

The following are elective options:

- R611 Advanced Qualitative Inquiry and Research Methods (3 cr.)
- R612 Interpretive Data Analysis (1-3 cr.) This course advances new qualitative standing of interpretive research methods, study designs, conditions of rigor in qualitative research, and research team building,. Students will explore ways of grounding their findings in the works of interpretive phenomenology, grounded theory and other interpretive methods meeting the needs of students. Students will explore multiple avenues for dissemination of interpretive research findings.

R800 Dissertation Seminar (3 cr.)

Dissertation: (16 credits)

- R899 Dissertation in Nursing (16 cr.)
- Y600 Clinical Reasoning and Diagnostic Processes in Advanced Practice Nursing (3 cr.) Introduces students to clinical reasoning and diagnostic processes used in providing health care in primary and acute care settings. Students apply knowledge and skills from pathophysiology, physical assessment, and evidence based practice to decision making in direct patient care. Issues related to third party reimbursement, regulation and scope of proactice, and the ethics of diagnostic decision making are included.

Nursing Major Focus Area: (24 credits)
These credits are devised by mentor and student to match learning needs, research questions and professional goals. May include transfer courses from M.S.N., independent study courses, research practicum, etc.

Internal or External Minor: (9-12 credits)
Cognate or supporting course work from inside or outside nursing. May include a minor in an alternate focus area, other approved minors, or individualized plans developed by the student's program planning advisory committee:

- Women's studies
- Educational psychology
- Sociology

- Health Policy
- Psychology
- Gerontology
- Anthropology
- Informatics
- Nursing Education Science
- Nursing Administration
- Life Sciences

Qualifying Exam

After the student has completed all course work for the Ph.D., students are required to take and pass a qualifying examination. The student's Advisory Committee will determine the manner in which the examination is given. It will be composed of a written and an oral component. The qualifying examination must be passed within one semester after completion of course work and at least eight months before the date the degree is awarded.

Oral Defense of the Dissertation (Final Examination)

Students provide an unbound copy of the completed dissertation to each member of the Research Committee in sufficient time to read it in its entirety. After reading it, the committee members should have direct communication with the committee chairperson regarding perceived readiness for the defense. 30 days prior to the defense, the candidate and the chair of the dissertation committee submits to the School of Nursing and the University Graduate School a one-page announcement noting the date and time of the final dissertation defense. Any member of the graduate faculty may attend the final examination; upon approval of the committee and the candidate, graduate students may attend as observers, not participants. At the end of the Dissertation Defense, the Research Committee makes one of the following decisions:

1. pass
2. conditional pass
3. deferred decision
4. failure

For rules and guidelines for final submission of the dissertation and completion of all degree requirements, students should refer to the Graduate School's Guide to the Preparation of Theses and Dissertations: http://www.iupui.edu/~gradoff/docs/thesesdissertations.pdf.

Faculty

University Dean

Professor Marion E. Broome*

Executive Associate Dean for Academic Affairs

Professor Judith A. Halstead*

Interim Associate Dean for Graduate Programs

Associate Professor Patricia R. Ebright*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors

Victoria D. Champion*

Chancellor's Professor

Anna M. McDaniel*

Emily Holmquist Professor

Joan E. Haase*

Professors

Tamilyn Bakas, Marion E. Broome*, Janet S. Carpenter*, Victoria D. Champion*, Deborah Cullen, Joanne R. Duffy*, Marsha L. Ellett*, Mary L. Fisher*, Joan E. Haase*, Judith A. Halstead*, Joyce S. Krothe* (B), Anna M. McDaniel*, Daniel J. Pesut*, Mary Jo Regan-Kubinski* (SB), Linda A. Rooda* (NW), Sharon L. Sims*, Melinda M. Swenson*, Weaver, Michael, Janet L. Welch

Associate Professors

Carol Baird, , Mary Basolo-Kunzer (SB), Cheryl A. Bean, , Janis Beckstrand*, Anne S. Belcher, Donna L. Boland*, Donna Bowles (SE), Janice M. Buelow*, Joe Burrage*, Linda Delunas (NW), Teresa M. Dobryzkowski (SB), Patricia R. Ebright*, Janet S. Fulton*, Janis E. Gerkensmeyer*, Barbara Habermann*, Kathleen M. Hanna*, Patricia R. Henry (SB), Susan Hickman, Sara L. Horton-Deutsch*, Pamela Ironside*, Angela M. McNelis, Susan M. Rawl*, Jacquelyn C. Reid (SE), Deanna L. Reising* (B), Mary Beth Riner, Kathleen Russell*, Rebecca R. Sloan*, Cynthia D. Sofhauser (SB), Linda Susan Wallace (KO),

Assistant Professors

Mary Bourke (KO), Karen Clark (E), Desiree Hensel (B), Seongkum Heo, Mikyoung Lee, Yvonne Lu, Tracy Magee, Valerie N. Markley (B), Joanne B. Martin, Laura McIlvoy (SE), Susan McLennon, Judy Myers (SE), Julie Otte, Susan Rouse (NW), Melanie Samardzija (NW), Wenn-Huey (Carol) Shieh, Deborah Stiffler, Diane Von Ah, Corinne Wheeler

Note: B after a faculty member's name indicates that the person teaches at the Bloomington campus; C, at Columbus; E, at East; KO, at Kokomo; NW, at Northwest; SB, at South Bend; and SE, at Southeast.

Courses

See the School of Nursing Graduate Bulletin for a complete list of offerings.

Nutrition and Dietetics

School of Health and Rehabilitation Sciences

Departmental E-mail: jopalka@iupui.edu

Departmental URL: http://shrs.iupui.edu/nutrition_dietetics/

Curriculum

Master of Science in Nutrition and Dietetics

The program is located at the IUPUI campus in Indianapolis and utilizes facilities throughout central Indiana. The purpose of the program is to provide an opportunity for Registered Dietitians to deepen their knowledge base and practice skills, particularly in the area of clinical nutrition. The curriculum is designed for

the student who has a special interest in the nutritional requirements and provision of nutrition therapy in acute and chronic conditions, or the care of special populations, such as pre-term infants. Program affiliations throughout central Indiana provide the opportunity for the student to work with patient populations in both outpatient and inpatient settings, as well as with the general public. Students may specialize in either adult or pediatric nutrition.

Degree Requirements

To earn the M.S. degree, a minimum of credit hours at the graduate level are required. Candidates for this degree may petition to apply up to 8 credit hours of graduate work from other institutions or programs to this degree.

Admission Requirements

Applicants should have a bachelor's degree from an accredited college or university, a minimum grade point average of B (3.0 on a 4.0 scale) overall, an appropriate level of achievement on the Graduate Record Examination, a current dietetic registration status and three letters of recommendation addressed to the Nutrition and Dietetics Program.

The applicant must submit a completed application form to the Office of Research and Graduate Studies, along with two copies of transcripts from all universities attended. Indiana University graduates should request that the Registrar's Office send unofficial copies of their transcript. Non–Indiana University graduates must submit at least one official transcript from each university attended. Proof of current dietetic registration status is required. A nonrefundable application fee is required. Applications and further information may be obtained by writing to the following address:

Dawn Lipker
Student Enrollment Specialist
School of Health and Rehabilitation Sciences
Indiana University–Purdue University Indianapolis
1140 W. Michigan Street
Indianapolis, IN 46202-5119

Grade Requirement

A minimum of a 3.0 (B) grade point average in graduate work is required for continuance in graduate study. When the grade point average of a student falls below 3.0 or the student is not making sufficient progress toward the degree, the Graduate Studies Committee will review the student's record and recommend to the dean that the student be placed on probation. Unless the student achieves a 3.0 grade point average or begins making satisfactory progress, in the next semester of enrollment, the student will not ordinarily be allowed to continue in the graduate program. For more information about academic regulations, contact the program director.

Thesis

Students may elect to complete a thesis or to take additional course work and complete a problem. Contact the graduate advisor for details.

Curriculum

Degree Requirements for the Thesis and Non-Thesis Options in the M.S. in Nutrition and Dietetics

Requirements

Core Courses

(Non-Thesis Option: 18-19 credit hours; Thesis Option: 21-22 credit hours)

- BIOC B500 Biochemistry (3 cr.) & PHSL F503 Human Physiology (4 cr.) **OR** BIOL 556 Physiology I (3 cr.) & BIOL 557 Physiology II (3cr.)
- NURS R505 Measurement and Data Analysis (3 cr.) **OR** GRAD G651 Introduction to Biostatistics I (3 cr.)
- SHRS N563 Research Methods in Nutrition and Dietetics (3 cr.) **OR** SHRS W520 Evidence Based Critical Inquiry in the Health Sciences** (3 cr.) **OR** GRAD G610 Topics in Translational and Implementation Research (3 cr.)
- SHRS N598 Research in Nutrition (3 cr.; Thesis Option, 6 cr.)
- SHRS N550 Human Nutritional Pathophysiology I (3 cr.)

Additional Credits chosen from the following:*

(Non-Thesis Option: 17-18 credit hours; Thesis Option: 14-15 credit hours)

- SHRS N552 Human Nutritional Pathophysiology II (3 cr.)
- SHRS N570 Pediatric Nutrition I # (3 cr.)
- SHRS N572 Advanced Pediatric Nutrition # (3 cr.)
- SHRS N576 Leadership in Pediatric Nutrition # (3 cr.)
- Other Graduate Level Courses

Total 36 (for both options)

* There are two tracks in the M.S. in Nutrition and Dietetics. Students interested in pediatric nutrition enroll in N550, N570, N572, and N576. Students interested in adult nutrition enroll in N550, N552,and additional courses that meet the particular interests of the student and are approved by the graduate advisor.

** Certificate Program in Health Sciences Patient Centered Outcomes

For students pursuing the E-Learning Graduate Certificate in Pediatric Nutrition Program

E-Learning Graduate Certificate in Pediatric Nutrition Program

This e-learning certificate requires completion of 12 credits (four courses) and provides registered dietitians with specialized pediatric nutrition knowledge, clinical and leadership skills in pediatric health care. The e-learning certificate course work applies to the Master of Science in Nutrition and Dietetics degree.

Course Requirements

SHRS N570 Pediatric Nutrition (3 credits)
SHRS N572 Advanced Pediatric Nutrition (3 credits)
SHRS N576 Leadership Development in Pediatric Nutrition (3 credits)

One of the following:

- SHRS N574 Nutrition Management of High Risk Neonates and Infants (3 credits)
- SHRS N596 Clinical Dietetics (3 credits)

Degree Requirements

Students must complete all required course work (the four designated courses) with a grade of B or better. No credits will be accepted from other institutions to fulfill the requirements of the certificate. No undergraduate courses can be used to fulfill the requirements of the certificate.

Admission Requirements and Procedures

Students admitted into the certificate program must meet all requirements of both the Graduate School and the School of Health and Rehabilitation Sciences. The minimum admissions requirements are: bachelor's degree from an accredited institution, evidence of dietetic registration, and a total undergraduate GPA of at least 3.00 on a 4.00 scale. To be admitted into the certificate program, students must submit the following:

1. Evidence of dietetic registration.
2. Official undergraduate transcripts.
3. 300-500 word personal statement of academic and professional goals.
4. Three letters of recommendation from those familiar with the applicant's academic and professionalperformance.
5. Application for e-learning certificate program "Leadership in Clinical Pediatric Nutrition."

E-learning Certificate Advisor

Karyl Rickard, 224 Coleman Hall, 1140 West Michigan St. Indianapolis, IN 46202-5180, (317) 278-0933, krickard@iupui.edu

Applications and further information maybe obtained by contacting:

Department of Nutrition and Dietetics
School of Health and Rehabilitation Services
Indiana University-Purdue University Indianapolis
1140 West Michigan St.
Indianapolis, IN 46202-5119

Faculty

Chairperson

Clinical Professor Jacquelynn O'Palka

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

M. Sue Brady (Emerita), Jacquelynn O'Palka, Karyl Rickard*, Arlene Wilson* (Emerita)

Associate Professors

Sara Blackburn, Judith Ernst

Assistant Professor

Ada Van Ness (Emeritus)

Adjunct Professors

James Lemons (Pediatrics), Donald Orr* (Pediatrics)

Graduate Advisor

Jacquelynn O'Palka, 224 Coleman Hall, 1140 W. Michigan Street, Indianapolis, IN 46202-5180, (317) 278-0933, jopalka@iupui.edu.

Courses

SHRS–N 500 Nutrition I (3 cr.) P: Graduate standing. Undergraduate courses in biological sciences or consent of instructor. This course applies the principles of physiology, chemistry, and biology to describe the role of nutrition and exercise in the human body, explores the interrelated and protective role of nutrition and exercise in wellness, health promotion, and disease prevention. This course is taught online.

SHRS–N 544 Diet Therapy (3 cr.) P: Dietetic internship. Study of physiological and biochemical alterations that occur during disease states and their effect on nutritional requirements and methods of providing nutrients.

SHRS–N 546 Medical Lectures (arr cr.) Lectures by professional staff and invited guests in the health care field.

SHRS–N 550 Human Nutritional Pathophysiology I (3 cr.) P: N500, F503 or BIOL 557, or consent of instructor. An integrated study of the biochemical and physiological aspects of human carbohydrate and lipid metabolism with special reference to fundamental nutrition issues, including determination of nutrient quality, nutrient interrelationships, micronutrients, and energy balance in humans and in common clinical problems.

SHRS–N 552 Human Nutritional Pathophysiology II (3 cr.) P: N550 or consent of instructor. A continuation of N550. An integrated study of the biochemical and physiological aspects of human protein and micronutrient metabolism, including determination of nutrient quality, nutrient interrelationships, and energy partitioning in humans and in common clinical problems.

SHRS–N 560 Review of Nutrition Standards (3 cr.) Review of various nutrition standards including those of the United States, the United Kingdom, Canada, and the World Health Organization. Course includes a review of all cited literature for one of the nutrients listed in the Recommended Dietary Allowances.

SHRS–N 563 Research Methods in Nutrition and Dietetics (3 cr.) P: Graduate level statistics course or consent of instructor. Study of research methodology utilized in nutrition and dietetics. Course includes critique of literature and preparation of a grant proposal.

SHRS–N 567 Management Issues in Dietetics (1 cr.) P: Dietetic intern. Advanced study in institutional and hospital dietetic management including personnel, financial, operational, and regulatory issues.

SHRS–N 570 Pediatric Nutrition I (3 cr.) P: B500, BIOL 557, undergraduate metabolic nutrition course, or consent of instructor. An application of principles of physiology, biochemistry, and nutrition to the specialized nutrient needs and nutritional care of healthy infants, children, and adolescents and those with the most common pediatric

conditions/illnesses or disorders of broad nutritional significance.

SHRS–N 572 Advanced Pediatric Nutrition (3 cr.) P: N550, N570, or consent of instructor. An application of principles of physiology, biochemistry, and nutrition to the specialized nutrient needs and nutritional care of infants, both pre-term and term, and patients with complex pediatric conditions/illnesses that have a significant nutritional component.

SHRS–N 574 Nutrition Management of High Risk Neonates and Infants (3 cr.) P: N572. An application of physiology, biochemistry, and nutrition to the specialized nutrient needs and nutritional care of neonates, both preterm and term, who require intensive care. Discussion will include nutritional management issues related to the infant(s) during hospitalization, at discharge, and after discharge.

SHRS–N 576 Leadership Development in Pediatric Nutrition (3 cr.) This is an entry-level leadership development series of experiential learning activities, including a leadership development project for post-baccalaureate health care professionals and fellows.

SHRS–N 590 Dietetic Internship (4–10 cr.) P: Dietetic internship. Supervised clinical experience in clinical and community nutrition and food service systems management. Course meets the requirements of the American Dietetic Association for the postbaccalaureate experience needed for dietetic registration. Previous admission into dietetic internship required. Not applicable to a graduate degree program.

SHRS–N 591 Seminar in Nutrition and Dietetics (1 cr.) Exploration of various topics and issues in nutrition.

SHRS–N 593 Topics in Nutrition (1–3 cr.) P: Consent of instructor. Exploration of a selected topic in nutrition at an advanced level.

SHRS–N 595 Readings in Nutrition (1–3 cr.) P: Consent of instructor. Individualized readings on topics not covered in regular course offerings.

SHRS–N 596 Clinical Dietetics (arr cr.) Clinical study in specialized areas of dietetics.

SHRS–N 598 Research in Dietetics (arr cr.) Original research as approved by the department.

Pathology and Laboratory Medicine

School of Medicine

Departmental E-mail: pathdept@iupui.edu

Departmental URL: www.pathology.iupui.edu

Curriculum

Degrees Offered

Master of Science in Pathology and Doctor of Philosophy

Areas of Specialization

Specialization is available in various areas of anatomical, clinical, and experimental pathology. Areas of emphasis are neuropathology, experimental pathology, clinical chemistry, clinical microbiology, hematopathology, immunohematology, molecular pathology, and others. All Ph.D. degree students and M.S. degree students in the Experimental Pathology and Laboratory Science tracks choose one of these subspecialties for concentrated course work and thesis/dissertation research. M.S. students in the Pathologists' Assistant track complete courses and practical experiences involving anatomic pathology techniques.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Applicants for the M.S. degree must have a bachelor's degree in clinical laboratory science (formerly medical technology), cytotechnology, microbiology, chemistry, or another biological science or have a bachelor's degree in another subject area but have completed all of the prerequisite courses for the degree track of interest. A completed application form, transcripts from all colleges attended, letters of recommendation, and scores on the Graduate Record Examination General Test must all be received before an application will be considered. A minimum grade point average of 3.0 (B) in undergraduate science courses and an interview with the graduate program committee are required. The route of entry into Ph.D. studies in pathology is through the Indiana University School of Medicine BioMedical Gateway (IBMG) program. For IBMG information, visit www.medicine.iu.edu/~gradschl/.

Master of Science in Pathology Degree

Course Requirements

Requirements vary, according to the area of emphasis.

M.S. Degree in Pathology with Emphasis in an Area of Experimental Pathology

This course of study is recommended for students who have an interest in basic science research and plan careers as research scientists. A minimum of 30 credit hours, including completion of a graduate-level general biochemistry course with a grade of C or higher and C808 Graduate Seminar; a maximum of 2 credits of C808 can be applied toward the required 21 credit hours of course work. Most students will also take C603 General Pathology. A grade of B or higher is required in C603. At least 21 credit hours must be in courses other than research. At least 3 but not more than 9 credits must be in research.

M.S. Degree in Pathology with Special Concentration in Pathology Laboratory Sciences

This course of study is recommended for students who wish to conduct investigative work in applied laboratory science. Graduates are primed for positions involving clinical teaching, laboratory supervision, and research and development. The M.S. with special concentration in one of the subspecialty areas of clinical pathology requires at least 30 credit hours but may require up to 40 credit hours or more, depending on the area of concentration, the background of the student, and the prerequisites needed for certain advanced courses. At least 3 but not more than 9 credit hours in research, a graduate-level biochemistry course, and C808 Graduate Seminar are required; a maximum of 2 credits of C808 can be applied toward the required 21 credit hours of

course work. Development of each student's curriculum of lecture and laboratory courses and of research and teaching requirements will be a joint effort of the student and the graduate advisory committee. Course work differs, depending on whether the M.S. degree is to be focused in the areas of clinical chemistry, clinical microbiology, hematopathology, immunohematology, or another clinical laboratory specialty area.

Thesis

Required for M.S. Experimental Pathology and Laboratory Science tracks. In special cases, published research may be substituted for the thesis. Consult the graduate advisor.

Final Examination

Oral, on the thesis.

M.S. Degree in Pathology: Pathologists' Assistant Track

This education prepares individuals to serve as pathologists' assistants. The pathologists' assistant is a health professional, qualified by academic and practical training, who assists in providing service in anatomic pathology under the direction and supervision of a qualified anatomic pathologist. The pathologists' assistant assists in the examination, dissection, and processing of tissue samples and participates in gross autopsy dissection. Pathologists' assistants also assist with education and research in the area of anatomic pathology. This M.S. track is a 22-month program. The first year includes basic science courses in gross anatomy, histology, microbiology, and physiology. Didactic pathology techniques courses and practical experience make up the second year. Requires 40 credits: 31 course credits and 9 credits from practicum experiences.

Thesis

Not required for M.S. Pathologists' Assistant track. A thesis option is available. Consult the graduate advisor.

Doctor of Philosophy Degree in Experimental Pathology

The route of entry into Ph.D. studies is through the Indiana University School of Medicine BioMedical Gateway (IBMG) program. Admitted students take a common curriculum of didactic courses and rotate in various research laboratories. Selection of a research laboratory at the end of the first academic year determines the student's degree department. For IBMG information visit www.medicine.iu.edu/~gradschl/.

Course Requirements

A total of 90 credit hours, of which a minimum of 35 credit hours must be in courses other than research. Required courses include a graduate-level general biochemistry course, one additional graduate biochemistry or molecular biology course, C603 Pathology or equivalent, and C808; a maximum of 4 credits of C808 can be applied toward the required 35 credit hours of course work. Additional appropriate courses will be identified by the student's advisory committee and may be selected from core courses in the Department of Pathology and Laboratory Medicine or other graduate basic medical science departments. A minimum of 45 credit hours in dissertation research (C859) is required.

Grades

Overall average of at least a B (3.0). A grade of C or higher in a graduate-level general biochemistry course and a grade of B or higher in C603 Pathology are required.

Minor

At least 12 credit hours in a related discipline or in life science involving lecture/laboratory courses other than research. If a life sciences minor is approved, a minimum of 6 credit hours must be obtained in a single department.

Foreign Language

Not required.

Qualifying Examination

Written and oral, covering course work and research proposal (in form of a National Institutes of Health grant proposal).

Research Proposal

Required (in form of a National Institutes of Health grant proposal); must be approved by student's advisory committee before completion of dissertation research.

Dissertation

Required.

Faculty

Chairperson

John N. Eble*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professor and Chancellor's Professor

Bernardino Ghetti* (Medical and Molecular Genetics, Neurobiology, Psychiatry)

Nordschow Professor of Laboratory Medicine

John N. Eble*

Clyde Culbertson Professor of Pathology

Thomas E. Davis, Jr.*

James Warren Smith Professor of Clinical Microbiology

Stephen D. Allen*

Lawrence M. Roth Professor of Pathology

Thomas M. Ulbright

Centennial Professor of Pathology

David J. Grignon*

Professors

Stephen D. Allen*, Merrill D. Benson*, Liang Cheng*, Oscar W. Cummings, Thomas E. Davis Jr.*, John N. Eble*, Kenneth Fife* (Microbiology and Immunology, Medicine), Roy Geib* (Microbiology and Immunology), Richard Gregory* (Oral Microbiology), David J. Grignon*,

Dean Hawley*, Meredith Hull, Richard Kohler (Medicine), Chao-Hung Lee*, Diane Leland*, Helen E.B. Michael*, Bernadette F. Rodak, Lawrence Roth* (Emeritus), Kenneth W. Ryder*, Daniel S. Smith, James Smith* (Emeritus), Thomas M. Ulbright

Associate Professors

Sunil Badve*, John Baenziger, William N. Crabtree, Harvey M. Cramer*, Magdalena B. Czader*, Taihung Duong*, Robert Emerson, Eyas M. Hattab*, Raymond Lloyd Konger*, Linda Marler, Jill R. Murrell*, Carrie L. Phillips*, Romil Saxena, Ruben G. Vidal*

Assistant Professors

Jey-Hsin Chen, Rong Fan, Muhammad Idrees, Mehdi Nassiri, Kathryn Rizzo, Xiaoyan Wang

Graduate Advisor

Professor Diane Leland*, Clarian Pathology Laboratory Building, Room 6027F, (317) 491-6646.

Courses

PATH–C 603 General Pathology (6 cr.) Basic concepts and principles of disease processes.

PATH–C 690 Techniques for Specimen Processing (2 cr.) P: Graduate courses in physiology and histology. Designed for M.S. iPathologists' Assistant students. Didactic and laboratory experiences in specimen management and tissue processing methods: histotechnology techniques including specimen procurement, processing, fixation, and staining, cytologic methods and electron microscopy sample processing.

PATH–C 691 Gross Surgical and Pediatric Pathology Techniques (3 cr.) P: Graduate physiology, histology, microbiology, gross anatomy, and C690. Designed for Pathologists' Assistant students. Didactic and laboratory experiences emphasize proper handling and evaluation of tissues removed during surgery and examined in the surgical or pediatric pathology laboratory. Human embryology and medical photography and terminology are also included.

PATH–C 692 Autopsy and Forensic Pathology Techniques (3 cr.) P: Graduate physiology, histology, microbiology, gross anatomy, C690, and C691. Designed for Pathologists' Assistant students. Didactic and laboratory experiences in autopsy and forensic pathology introduce students to all phases of the human post-mortem examination, including evisceration, dissection, description of findings, and preparation of post-mortem reports.

PATH–C 693 General and Clinical Pathology (3 cr.) P: Graduate physiology, histology, microbiology,gross anatomy, C690, C691, and C692. Designed for Pathologists' Assistant students. Didactic and laboratory experiences introduce students to the basic concepts of pathologic processes and provide them with a working knowledge of clinical pathology testing, including chemistry, hematopathology, transfusion medicine, and microbiology.

PATH–C 694 Systemic Pathology (3 cr.) P: Graduate physiology, histology, biochemistry, microbiology, gross anatomy, C690, C691, C692, and C693. Designed for Pathologists' Assistant students. Didactic and laboratory experiences in systemic pathology provide students with a broad base of knowledge of pathologic processes in various organ systems including the nervous, pulmonary, cardiovascular, genitourinary, digestive, and musculo-skeletal systems.

PATH–C 695 Practicum for Pathologist Assistants (1–4 cr.) P: Graduate physiology, histology, microbiology, gross anatomy, C690, C691, and C692. Designed for Pathologists' Assistant students. Students complete seven to nine month-long modules involving surgical, pediatric, autopsy, and forensic pathology at various facilities. Students also study medical ethics, laboratory operations, management, and information systems, and educational techniques.

PATH–C 700 Clinical Chemistry I (3 cr.) P: B500 or B800 or equivalent. Methodology, instrumentation, and interpretation with clinical correlation of procedures in the clinical chemistry laboratory.

PATH–C 701 Clinical Chemistry II (2–3 cr.) P: B500 or B800 or equivalent. Special clinical chemistry therapeutic drug monitoring and radioassay, radioimmunoassay, and enzyme immunoassay.

PATH–C 800 Advanced Pathology (arr cr.) Subject material and credit hours arranged to conform to needs of student.

PATH–C 802 Advanced Morphologic Hematology (2 cr.) P: Consent of instructor. A graduate-level course with emphasis on diagnostic morphologic hematology. This course covers several aspects of morphologic hematology, including erythrokinetics, myeloid and erythroid morphology, leukemia classification, myelodysplastic syndromes, myeloproliferative disorders, and newer concepts in diagnostic hematology.

PATH–C 803 Diagnostic Immunopathology (2 cr.) P: Basic undergraduate immunology and permission of instructor. Emphasis on immunobiology and diagnostic immunopathology. This course covers several aspects of immunopathology including autoimmune disease, transplantation biology, immunodeficiency disorders, and use of molecular diagnostics.

PATH–C 808 Graduate Seminar in Pathology (1 cr.) P: Consent of instructor. One-hour, graduate-level seminar series with emphasis on experimental pathology. First-year graduate students present critical literature reviews of contemporary research topics. More advanced students present proposals and reports of their research.

PATH–C 820 Advances in Diagnostic Microbiology (3 cr.) Discussions of infectious diseases and agents of infectious diseases including source, clinical manifestations, pathogenesis, epidemiology, treatment, and prevention and control, and the correlation of these subjects with laboratory diagnostic methods. Contemporary subjects will be emphasized.

PATH–C 850 Cellular Structure of the Nervous System (3 cr.) Cellular structure and ultrastructure of the C.N.S. in normal and experimental situations, including cell biology of neurons, astrocytes, oligodendroglia, brain macrophages, mast cells, brain vessels, and barriers. Organization of neural systems into global and point-to-

point circuits; generative and regressive phenomena; and cerebral transplantation in neurodegenerative conditions.

PATH–C 858 Experimental Pathology (5 cr.) Review and performance of selected experiments in pathology illustrating the types of pathologic processes.

PATH–C 859 Research in Pathology (arr cr.) Supervised initiation of a research project in pathology, and counseling in the completion of a thesis. This course is eligible for a deferred grade.

PATH–C 862 Basic Pathologic Techniques (5 cr.) Methods of the histologic and chemical laboratories of pathology; principles of examination used in the usual procedures of surgical and autopsy pathology.

PATH–C 875 Biochemical Pathology (3 cr.) P: C603 or B800. A survey of biochemical pathology as demonstrated by recent advances in research in pathology. Selected topics for lecture and discussion will include aspects of tissue, cellular, subcellular, and molecular pathology.

PATH–G 556 Methods of Humane Animal Experimentation (1 cr.) The purpose of this course is to provide graduate students entering careers in life science disciplines with the opportunity to obtain training in the proper care and humane use of laboratory animals. Federal regulations and considerations in the selection of animal models will also be discussed.

PATH–G 655 Research Communications Seminar (2 cr.) Study of the methodological and systematic treatments of scientific data required for effective communication through written primary and secondary research publications, oral presentations, abstracts, poster presentations, and grant proposals.

PATH–G 890 Methods in Molecular Biology and Pathology (3 cr.) P: G865 or J838, and consent of instructor. Basic principles and techniques in molecular biology and pathology. Particular emphasis will be on molecular techniques that can be used to study problems related to biochemistry and pathology.

Pharmacology and Toxicology

School of Medicine

Departmental E-mail: ahermann@iupui.edu

Departmental URL: http://pharmtox.iusm.iu.edu/

Curriculum

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Undergraduate grade point average should be well above 3.0 (B). Graduate Record Examination General Test is required for the Ph.D. and for the M.S.

Pharmacology Program

See also “Pharmacology” in the entry for the Medical Sciences Program, Bloomington, in this bulletin.

Pharmacology Graduate Student Advisor

William J. Sullivan, Jr., Ph.D., Medical Science Building A401, (317) 274-7844, wjsulliv@iupui.edu

Degrees Offered

Master of Science and Doctor of Philosophy

Master of Science Degree

Course Requirements

For the M.S. in Pharmacology, students must take a minimum of 15 credit hours of academic course work and must take a minimum of 15 credit hours of independent research toward a scientific publication.

Thesis

Required.

Final Examination

Not applicable.

Doctor of Philosophy Degree

Course Requirements

All Pharmacology Ph.D. students will be required to take 28 hours of coursework (of that 6 hours will be rotations); the remaining 62 hours will be research and seminar, for a total of 90 hours. Other requirements for completing the Ph.D. program are (1) publishing two first-author papers, or submitting a statement from the student’s research committee indicating that these will be forthcoming; and (2) achieving two of the following: (a) submitting a grant application, (b) co-authoring a third paper, and (c) presenting two abstracts at regional, national, or international meetings.

Minor

Students generally minor in life sciences. Students should consult the Graduate Student Advisor in planning their program.

Advisory Committee

An advisory committee is appointed when the student first registers for classes.

Qualifying Examination

Written and oral, over concepts and research in pharmacology.

Final Examination

Oral defense of dissertation.

[1]See also “Pharmacology” in the entry for the Medical Sciences Program, Bloomington, in this bulletin.

Toxicology Program

Degrees Offered

Master of Science and Doctor of Philosophy

Master of Science Degree

Course Requirements

For the M.S. in Toxicology, students must take a minimum of 15 credit hours of academic course work and must take a minimum of 15 credit hours of independent research toward a scientific publication.

Thesis

Required.

Final Examination

Not applicable.

Doctor of Philosophy Degree

Course Requirements

All Toxicology Ph.D. students will be required to take 28 hours of coursework (of that 6 hours will be rotations); the remaining 62 hours will be research and seminar, for a total of 90 hours. Other requirements for completing the Ph.D. program are (1) publishing two first-author papers, or submitting a statement from the student's research committee indicating that these will be forthcoming; and (2) achieving two of the following: (a) submitting a grant application, (b) co-authoring a third paper, and (c) presenting two abstracts at regional, national, or international meetings.

Minor

Students generally minor in pharmacology or pathology. Students should consult the Graduate Student Advisor in planning their program.

Advisory Committee

An advisory committee is appointed when the student first registers for classes.

Qualifying Examination

Written and oral, over concepts and research in toxicology.

Final Examination

Oral defense of dissertation.

Faculty

Chairperson

Michael R. Vasko*

Director, State Department of Toxicology

Michael A. Wagner

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Dean and Walter J. Daly Professor

D. Craig Brater* (Medicine)

Paul Stark Professor

Michael R. Vasko*

H. H. Gregg Professor of Oncology

Ahmad R. Safa*

Showalter Professor

Grant D. Nicol*

Chancellor's Professor

Joseph A. DiMicco*

Andrew and Peggy Thompson Chair in Hematology/ Oncology

Jian-Ting Zhang*

Professors

Gerry Oxford*, Sherry F. Queener*, Lynn R. Willis* (Emerita)

Associate Professors

Nikolai Broustovetski*, Theodore R. Cummins*, Richard M. Nass*, William J. Sullivan, Jr.*

Assistant Professors

Kai-Ming Chou*, Jill C. Fehrenbacher*, Lisa M. Kamendulis*, Rajesh Khanna*

Adjunct Graduate Faculty

Adjunct Professors

David Flockhart* (Medicine), Mark Kelley* (Pediatrics), Linda Malkas (Oncology), Anantha Shekhar* (Psychiatry), Jeffrey Travers* (Dermatology)

Adjunct Associate Professors

Cynthia Hingtgen* (Neurology), Daniel Rusyniak (Emergency Medicine)

Adjunct Assistant Professors

Andy Hudmon* (Biochemistry), Karen Pollok (Pediatrics), Michael Rubart-von der Lohe* (Pediatrics)

Courses

PHAR–F 598 Drugs, Diseases, and Poisons (3 cr.) P: A course in basic biology or physiology equivalent to BIOL K324 or BIOL 501. Introductory course in pharmacology and toxicology primarily for senior undergraduate students. The course provides an overview of the molecular basis of drug action and pharmacological properties of several of the major drug groups used in medical science.

PHAR–F 602 Pharmacology: Lecture (5 cr.) P: BIOC B800, PHSL F613, F614. Mode of action of drugs as a basis for therapy.

PHAR–F 603 Pharmacology: Laboratory (2 cr.) Taught in conjunction with F602.

PHAR–F 801 Introduction to Research in Pharmacology and Toxicology (1–3 cr.) Application of basic laboratory methods to pharmacological problems. Consideration of theoretical principles, instrumentation, and applications.

PHAR–F 803 Renal Pharmacology (3 cr.) P: F602. Physiological and metabolic responses of the kidneys to various classifications of drugs.

PHAR–F 804 Introduction to Pharmacology and Toxicology I (3 cr.) This course will teach the fundamental principles of pharmacology and toxicology for the beginning graduate student, as an introduction to the discipline.

PHAR–F 808 Myocardial Biology (3 cr.) The cellular biology of muscle, with emphasis on the regulation of the

internal ionic milieu and its effect on function of cardiac cells. The contractile proteins and the ion transport systems, Na+, K+ -ATPase, sarcoplasmic reticulum, and mitochondria will be considered in detail.

PHAR–F 809 Neuropharmacology (3 cr.) P: F602 and BIOC B835, or permission of instructor. Drugs which affect the nervous system, with particular emphasis on their central action. Although neurochemical effects will be stressed, evidence from neurophysiology and behavior will also be considered.

PHAR–F 810 Pharmacology of Autonomic Cardiovascular Control: Central and Peripheral Mechanisms (3 cr.) The physiology and pharmacology of sympathetic and parasympathetic nervous control of the cardiovascular system; pharmacology of synaptic mechanisms in peripheral and central pathways controlling autonomic outflow.

PHAR–F 812 Research in Toxicology (1–12 cr.) Independent laboratory research to fulfill dissertation requirements for either a master's or a doctorate degree in toxicology. Students must be enrolled in graduate studies in the Department of Pharmacology and Toxicology to register for this course.

PHAR–F 813 Clinical Pharmacokinetics (3 cr.) Design and complete mathematical analysis of pharmacokinetic studies in humans. The clinical utility of pharmacokinetics will be stressed, but the course will also have definite value for those involved with drug studies in animals.

PHAR–F 816 Clinical Toxicology (3–5 cr.) P: F602. Signs and symptoms resulting from common poisons and drugs. Chemical analyses as aids in diagnosis.

PHAR–F 819 Chemical Carcinogenesis (3 cr.) This course examines the biochemical and molecular mechanisms by which chemicals cause cancer. Emphasis will be on the uptake, metabolism, cellular targets and specific stage(s) of the cancer process that are affected by chemical carcinogens. Discussions will expand on the basic principles of carcinogenesis as they apply to the latest advances in the field.

PHAR–F 820 Cancer Chemoprevention (3 cr.) This course will examine the biochemical and molecular mechanisms of natural and synthetic cancer chemopreventive agents.

PHAR–F 825 Research in Pharmacology (arr cr.) Independent laboratory research for fulfilling dissertation requirements.

PHAR–F 826 Seminar in Toxicology (1 cr.) Literature and research reports by students and staff.

PHAR–F 830 Seminar in Pharmacology and Toxicology (1 cr.) Literature and research reports by students and staff.

PHAR–F 835 Molecular Mechanisms of Drug Action (3 cr.) Biochemical mechanisms underlying drug actions and reactions including toxicologic effects of drugs will be covered, with emphasis on molecular mechanisms involving drug receptor interaction, the actions of drugs and hormones on regulatory mechanisms in various disease states.

PHAR–F 836 Physiological Disposition of Drugs (3 cr.) Factors affecting the absorption, distribution, metabolism, and excretion of drugs will be discussed in terms of environmental, biochemical, and physiochemical parameters. Pertinent literature will be reviewed and special problems discussed.

PHAR–F 838 Cellular and Molecular Toxicology (3 cr.) This course examines the cellular mechanisms that mediate xenobiotic toxicity at the cellular, biochemical and molecular level. The course emphasizes mechanisms through which toxic chemicals act to evoke cell injury and cell death.

PHAR–F 840 Advanced Pharmacology and Toxicology (2–5 cr.) P: F602. Advanced studies of pharmacodynamic mechanisms in cardiovascular, central nervous system, and renal pharmacology and toxicology. Experimental design related to recent advances and current hypotheses concerning drug action and toxicity.

PHAR–F 841 Advanced Topics in Toxicology (1–3 cr.) This course will involve a series of lectures and discussions on new advances in toxicology. The course will focus on metabolic, cellular, and molecular mechanism by which toxic agents produce injury.

PHAR–F 843 Pharmacology of Cellular Transduction (3 cr.) This course focuses on mechanisms involved in cellular signal transduction ranging from the molecular biology of receptors to the role of transduction cascades in drug action. Students will participate extensively in discussion of issues.

PHAR–F 850 Experimental Design Analysis in Pharmacology and Toxicology (3 cr.) P: F602. This course presents experimental methods and data analysis used in pharmacological and toxicological experimentation. Emphasis will be on experimental design.

GRAD–G 743 Fundamentals of Electrical Signaling and Ion Channel Biology (1 cr.) Experimental basis for cellular and molecular concepts of electrical excitability and membrane transport through ion channels. The goals are to foster an understanding of how we accumulate information and to provide students with tools to evaluate hypotheses and to define unanswered questions, rather than provide current "facts" to memorize.

GRAD–G 747 Principles of Pharmacology (1 cr.) This course is intended for incoming basic science doctoral graduate students in the School of Medicine Pharmacology & Toxicology programs or other interested graduate students. This course covers the basics of drug-receptor interactions, drug metabolism, pharmacogenetics, and pharmacokinetics. This course will include PowerPoint presentations and student presentations.

GRAD–G 748 Principles of Toxicology 1 (1 cr.) This course will present the fundamental concepts of toxicology necessary to understand the effects of chemicals on human health. Cellular and molecular mechanisms involved in toxic responses elicited by pharmaceutical and environmental agents, activation and detoxification of drugs and chemicals, and the principles of carcinogenesis and mutagenesis will be presented.

GRAD–G 754 Principles of Toxicology 2 (1 cr.) Xenobiotic-induced target organ toxicity will be discussed with respect to the biological and/or chemical factors that influence toxicity at a tissue site, the modes of action for producing damage, and the methodology used to measure injury. This course is designed to provide a foundation for understanding the complex interactions between toxicants and biological systems from a basic science approach.

GRAD–G 755 Principles of Toxicology 3 (1 cr.) The effects associated with specific classes of chemicals, including chemical agents that either demonstrate a great chance for injury and/or pose significant potential for human exposure will be presented. The chemical classes covered will include selective metals, solvents and alcohols, pesticides, plastics, and gases.

Cross-Listed Courses

Biochemistry

- B800 Medical Biochemistry (5 cr.)
- B868 Advanced Molecular Biology (1-3 cr.)

Pathology

- C603 General Pathology (6 cr.)
- C859 Research in Pathology (cr. arr.)

Philanthropic Studies

School of Liberal Arts

Departmental E-mail: maphil@iupui.edu

Departmental URL: www.philanthropy.iupui.edu

Curriculum

Philanthropic Studies at Indiana University is interdisciplinary, interprofessional, and system wide. The field addresses voluntary contributions of time and money, voluntary associations, and what has been called “the social history of the moral imagination.” Areas of inquiry range from the history of philanthropy and philanthropy in literature to nonprofit management and legal issues. Undergraduate and graduate programs in various areas of philanthropic studies are available in the University Graduate School, the School of Liberal Arts at IUPUI, the School of Public and Environmental Affairs, and other schools at IUPUI and IU Bloomington.
New courses and degree programs develop rapidly. For up-to-date information, please contact the Philanthropic Studies Program (www.philanthropy.iupui.edu).

Degrees Offered

Master of Arts, Executive Master of Arts, Doctorate of Philosophy, Dual Master of Arts with MA in Economics, MA in History, MSN in Nursing, MS in Library and Information Sciences and MPA in Nonprofit Management.

Special Departmental Requirements
(See also general University Graduate School requirements.)

Master of Arts Degree

The Master of Arts in Philanthropic Studies focuses on the history, culture, and values of philanthropy. Its objectives are to enable students to gain the knowledge and skills either to pursue further graduate study in relevant fields or to pursue careers in the independent sector or in related fields; to enable students to investigate the broader theoretical issues of philanthropy and of their chosen areas of specialization from a variety of disciplinary and interdisciplinary perspectives; and to utilize the interdisciplinary base to maintain a thoroughgoing critical inquiry into the historical and cultural implications of philanthropy.

Admission Requirements

Requirements include a bachelor’s degree from an accredited college or university, a minimum 3.0 grade point average on a scale of 4.0, and a minimum 3.0 average in the student’s major field. In addition, students seeking admission to the program should demonstrate an appropriate level of achievement on the Graduate Record Examination (or comparable proficiency test) and must arrange for three letters of recommendation that speak to the applicant’s academic and personal qualifications to be addressed to the M.A. program Admissions Committee.

Applicants who do not meet all of the requirements listed above may be admitted to the program on a provisional basis, in which case their status will be reviewed after a fixed period of time to determine whether they may continue in the program.

Financial Aid

Several scholarships and research assistantships are available. Please contact the Philanthropic Studies Program for more information (www.philanthropy.iupui.edu).

Course Requirements

The M.A. in philanthropic studies requires a total of 36 credit hours: 21 required, 6 in electives, 6 more for a thesis or courses in lieu of thesis (at least one of which has to involve significant research), and 3 for a directed philanthropic studies internship. A minimum of 18 credit hours in core and elective courses combined must be in the School of Liberal Arts at IUPUI, and not more than 9 credit hours may be taken in courses numbered below 500. These 9 credits may come only from courses approved for University Graduate School credit. In addition, for the nonthesis option, at least one of the courses must have a major research component.

In order to earn the M.A. in philanthropic studies, students must maintain a 3.0 grade average on a scale of 4.0. Grades in courses counting for credit toward this degree may be no lower than C (2.0 on a scale of 4.0).

The 18 credits of core courses normally include

Philanthropic Studies P521 The Nonprofit and Voluntary Sector (this course or SPEA V521 are required prerequisites before any other courses can be taken, please contact department for questions); History H509 Special Topics in European History (Topic: History of Philanthropy in the West) or History H516 History of Philanthropy in the United States; Philosophy P542 The Ethics and Values of Philanthropy; PHST P555/SPEA V558 Fund Development for Nonprofit Organizations or SPEA V522 Human Resource Management in Nonprofit Organizations or SPEA V559 Principles of Social Entrepreneurship or SPEA V526 Financial Management for Nonprofit Organizations or other content course that deals with Human and Financial resources for Philanthropy; Philanthropic Studies P523 Civil Society and Philanthropy, and Philanthropic Studies; P590

Internship in Philanthropic Studies. In addition, students will take either Economics E514 The Nonprofit Economy and Public Policy or Philanthropic Studies P535 The Law of Nonprofit Organizations, and one comparative Philanthropy course to be selected from the following or other approved courses: Religious Studies R590 Religion and Philanthropy, Philanthropic Studies P530 Cross-Cultural Dimensions of Giving, and SPEA V524 Civil Society in Comparative Perspective.

Master of Arts Degree in Philanthropic Studies: Executive Format

Many students interested in the M.A. program are unable to attend on a traditional residential basis because of their distance from Indianapolis and ongoing job responsibilities.
A participant in the executive format master's program can finish the requirements for the degree by completing:

- six intense one-week residential classes or regularly scheduled classes at IUPUI;
- distance education and directed off-site course work; and
- elective study at a qualified institution.

Each summer course requires one week of intense on-campus study and is preceded by a pre-residential period of approximately six weeks in length which includes preparatory reading and assignments. Each session is followed by a post-residential period which includes evaluative experiences to be completed at home. During both the pre-residential and post-residential periods, faculty work with students by using the web, e-mail, fax, telephone, and postal service.

Degree requirements for the executive M.A. program are essentially the same as the requirements for the residential M.A. in philanthropic studies. However, instead of Philanthropic Studies P523, students must take Philanthropic Studies P535 The Law of Nonprofit Organizations and Economics E514 The Nonprofit Economic and Public Policy.

Applicants for the executive program must meet the same admission criteria as those applying for the residential program, with the addition of three to five years of work experience in the nonprofit sector being required in lieu of the GRE requirement. Deadline dates for admission are January 15 for non–U.S. citizens and February 1 for U.S. citizens. Applications will be considered after the deadline until the cohort is full. Please contact the department for more information.

For more information, contact the Center on Philanthropy, (317) 274-4200 or www.philanthropy.iupui.edu.

Dual Degree Master of Arts in Philanthropic Studies and Master of Arts in Economics

The dual master's degree in philanthropic studies and economics substantially benefits students intending to pursue a career in independent research, academia, or practice. Normally, those pursuing a career in research or academia continue in a Ph.D. program in economics, finance, accounting, management, marketing, or public policy. Very few doctoral programs include substantial content on philanthropy or nonprofit organizations.
As such, the M.A. in philanthropic studies provides a broad interdisciplinary background that makes the future researcher sensitive to the institutional details, values, and history of the sector, thus leading to better research. For the future nonprofit manager or leader, economics provides the principles and methodologies to make informed decisions on the appreciative level, the policy level, and the managerial level.

Admission requirements for the dual degree program are identical to those for each program separately. Separate application must be made to each of the two programs. Students are expected to take responsibility for learning about and meeting the admission requirements of each school individually, which may differ from each other in application documents required, minimal standards of criteria for admission, and deadline dates. Students must make plans early with advisors in both programs to identify (1) common courses and (2) thesis credit.

Study for the two degrees can be combined for a total of 51 credit hours rather than the 66 credit hours that would be required if the two degrees were taken separately. Two of the required core courses for the M.A. in economics may be selected as electives to meet the philanthropic studies requirement for two applied electives. One of the required philanthropic studies courses, Economics E514 The Nonprofit Economy and Public Policy, may be taken to meet 3 of the 12 credit hours of electives required in the economics program. A common thesis meets the requirements of both departments. Further information regarding regulations governing advanced degree programs may be obtained from the respective departments.

Dual Degree Master of Arts in Philanthropic Studies and Master of Arts in History

The dual M.A. in history and philanthropic studies creates a unique opportunity to pursue critical inquiry into the historical, cultural, philosophical, and economic implications of voluntary action for the public good. Historians routinely study the role of nonprofit organizations, self-help groups, and philanthropic institutions. This dual-degree program offers an interdisciplinary focus on the past, present, and future. This degree will be attractive to students wishing to pursue (1) careers that demand the skills and talents developed by cross-training in history and philanthropy or (2) doctoral programs that encourage new and creative approaches to the historical study of philanthropy, broadly defined.

Admission requirements for the dual degree program are identical to those for each program separately. A separate application must be made to each of the programs. Prospective students are expected to take responsibility for learning about and meeting the different admission requirements and deadlines of each department. Students must make plans early with advisors in both programs to identify common courses and a thesis topic.

Study for these two degrees can be combined for a total of 51 credit hours (U.S. or European history concentrations) or 54 credit hours (public history) rather than the 66 or 72 credit hours that would be required if the two degrees were taken separately. For all concentrations, the required 700-level seminar for the M.A. in history may be selected as an elective to meet the philanthropic studies requirement for one of two electives. The required philanthropic studies course H509 History of Philanthropy in the West or H511 History of Philanthropy in the United

States may be taken to meet the history requirement for a history elective. Required courses Philosophy P542 Ethics and Values of Philanthropy or PHST P555/SPEA V558 Fund Development for Nonprofit Organizations or SPEA V522 Human Resource Management in Nonprofit Organizations or SPEA V559 Principles of Social Entrepreneurship or SPEA V526 Financial Management for Nonprofit Organizations or other content course that deals with Human and Financial resources for Philanthropy, may be taken to meet 3 of the 6 credits of outside electives that may be taken in the history program. For public history students, History H543 Practicum meets the requirement for PHST P590 Internship for the philanthropic studies program. A common thesis meets the requirements of both departments. Further information regarding regulations governing advanced degree programs may be obtained from the respective departments.

Dual Degree Master of Arts in Philanthropic Studies and Master of Science in Nursing

While the M.S.N. with a major in nursing administration provides an essential background for the nurse executive, the addition of the M.A. in philanthropic studies adds an appreciation of the philanthropic tradition and the skills to become accomplished developmental officers.

Admission requirements for the combined degree program are identical to those for each program separately. Separate application must be made to each of the two programs. Students are expected to take responsibility for learning about and meeting the admission requirements of each school individually, which may differ from each other in application documents required, minimal standards of criteria for admission, and deadline dates. Applicants should apply for the combined degree option before completing 21 credit hours in the M.S.N. in Nursing Administration Program and before completing the core requirements or 18 credit hours of the M.A. in philanthropic studies. Students must make plans early with advisors in both programs to identify (1) common courses and (2) thesis credit.

Study for the two degrees can be combined for a total of 60 credit hours rather than the 78 credit hours that would be required if the two degrees were taken separately. Two of the required courses for the M.S.N. are used as electives to meet the Philanthropic Studies Program requirement of two electives. The P590 Internship required for the M.A. will meet the administrative practicum requirement for the M.S.N. The M.A. thesis or approved doctoral-level courses, plus one additional approved course, fulfill the required M.S.N. focus concentration. Students can choose between Nursing L671, or Economics E514 in the M.A. program may be taken to meet the SPEA H514 requirement in the M.S.N. program. Further information regarding regulations governing advanced degree programs may be obtained from the respective departments.

Dual Degree Master of Arts in Philanthropic Studies and Master of Science in Library and Information Sciences (SLIS)

Designed for the student seeking a management career with libraries and other nonprofit institutions. Content includes gaining expertise in management of special library programs, fund-raising and endowment management, capital project management and leadership in academic, corporate or large public libraries. The dual MLS–MA in Philanthropic Studies program requires completion of a minimum of 51 credit hours of graduate course work. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Philanthropic Studies Program at the IUPUI Graduate School and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

Dual Degree Master of Arts in Philanthropic Studies and Master of Public Affairs in Nonprofit Management

The continual blurring of sectors and the call for government devolution demand that advanced education for public managers must address critical issues associated with the relationship between and the functions of nonprofit and government agencies. The combined degree in public affairs in the School of Public and Environmental Affairs (SPEA) and in the Philanthropic Studies Program provides an education with breadth and depth. Students in this combined degree program have the opportunity to pursue critical inquiry into the "how" and the "why" of nonprofit management and philanthropy. As a result they are better prepared to be scholars and reflective practitioners.

Admission requirements for the combined degree program are identical to those for each program separately. Separate application must be made to each of the two programs, and students should take responsibility to learn about and meet the admission requirements of each school individually, which may differ from each other in application documents required, minimal standards of criteria for admission, and deadline dates. Applicants should apply for the combined degree option before completing the core requirements or 36 credit hours of the M.P.A. with a nonprofit management concentration and before completing the core requirements or 18 credit hours of the M.A. in philanthropic studies. Students must make plans early with advisors in both programs to identify (1) common courses and (2) thesis credit.

Study for the two degrees can be combined for a total of 60 credit hours (rather than the 84 credit hours that would be required if the two degrees were taken separately). The dual degree curriculum requires 21 credit hours in SPEA core courses and 12 credit hours in Philanthropic Studies core courses. In addition, students must take either SPEA V521 or PHST P521 (The Nonprofit and Voluntary Sector), SPEA V522 (Human Resource Management in Nonprofit Organizations), three nonprofit application courses, a comparative elective in Philanthropic Studies, an additional elective approved by their advisor, and a directed Philanthropic Studies internship. Students may fulfill their philanthropic studies thesis requirement with their SPEA capstone, but must then take another Philanthropic Studies elective, approved by their advisor.

Further information regarding regulations governing advanced degree programs may be obtained from the respective departments.

Ph.D. in Philanthropic Studies

This program is designed to prepare future scholars and leaders in the world of philanthropy, higher education, and nonprofit organizations. It is intended for students who are seeking a traditional doctoral degree, not a professional

degree. The Ph.D. will prepare students for academic positions as well as for research and leadership positions in a wide variety of nonprofit organizations.

Before admission to the Ph.D. program, students must complete a master's degree in philanthropic studies or at least 30 credits of equivalent graduate course work. Equivalent work will be determined by the Admissions Committee, subject to applicable Indiana University rules. Examples include courses in nonprofit management, civil society, philanthropic history, ethics, religion, philanthropy, public administration, and business.

The minimum requirements for the Ph.D. in philanthropic studies are 90 credit hours of advanced study, of which 30 credit hours may be transferred from a master's degree or equivalent program that has covered the concepts of philanthropic studies as described in Indiana University's M.A. in Philanthropic Studies Program. The credit hours for the Ph.D. include the following categories: 12 credit hours of required Philanthropic Studies doctoral courses, 12 credit hours in a minor field, 9 credit hours of research methods, and 6 credit hours of electives. The remaining 21 credit hours are to be used as dissertation research credit taken in additional coursework that supports the dissertation research.

Ph.D. Minor in Philanthropic Studies

Ph.D. students in other departments may, with the consent of their committee, minor in philanthropic studies. The minor will enable the student to take an organized body of courses focusing on the history, culture, and values of philanthropy, defined broadly as "voluntary action for the public good."

The minor requires 12 credit hours of course work to be taken from an approved list of courses, including either SPEA V521 or PHST P521 (The Nonprofit and Voluntary Sector), and passed with a grade of B (3.0) or higher in each course. With written approval from the Director of Graduate Programs in Philanthropic Studies, courses other than those listed may be accepted to fulfill degree requirements. No more than 6 credit hours of course work may be transferred from another university and applied toward this requirement, and such credit must be approved by the Director of Graduate Programs. Students must also successfully pass a question on Philanthropic Studies in their qualifying exams or equivalent tests required by their departments.

To arrange for a Philanthropic Studies minor, students should contact the Director of Graduate Programs in Philanthropic Studies, who will also recommend a member of the Philanthropic Studies faculty to serve as a minor field advisor.

Faculty

Chair of Philanthropic Studies Faculty

Professor Dwight F. Burlingame*

Director of Academic Programs

Professor Dwight F. Burlingame*

Director of Center on Philanthropy

Professor Patrick M. Rooney*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Wolfgang Bielefeld*, SPEA; Robert G. Bringle*, Psychology; Dwight F. Burlingame*, Libraries; Phillip Cochran*, Business; Ulla Connor*, English; Thomas Davis*, Religious Studies; Robert Dibie, SPEA (IUK); Kirsten A. Grønbjerg*, SPEA (IUB); Donald Hossler*, Education (IUB); Bessie House-Soremekun, Political Science; Lawrence A. Jegen III, Law; Leslie Lenkowsky*, SPEA (IUB); Debra J. Mesch*, SPEA; Eric M. Meslin*, Medicine and Philosophy; Richard B. Miller*, Religious Studies (IUB); James L. Perry*, SPEA, (IUB); William M. Plater*, English; David Reingold*, SPEA (IUB); Patrick Rooney*, Economics; Adrian Sargeant*, SPEA; Philip V. Scarpino, History; William H. Schneider*, History; Jane Schultz, English; John H. Stanfield, II, African American and African Diaspora Studies (IUB); Richard Steinberg, Economics; Susan Sutton*, Anthropology and Women's Studies; Eugene R. Tempel, Education; Brian Vargus*, Political Science; James M. Walker*, Economics (IUB); Robert White*, Sociology; Patricia Wittberg*, Sociology

Associate Professors

Karl Besel, SPEA (IUK); Matthew Todd Bradley, Political Science (IUK); David Campbell, Political Science (Notre Dame); David Craig, Religious Studies; Kevin Cramer, History; Edward E. Curtis IV, Religious Studies; Gregory P. Gramelspacher, Medicine; Richard Gunderman*, Radiology and Philosophy; Robert Katz, Law; Sheila Kennedy*, SPEA; Elizabeth Kryder-Reid, Anthropology and Museum Studies; Una Okonkwo Osili, Economics; Kevin Robbins, History; Nancy M. Robertson, History; Anne Beeson Royalty*, Economics; Michael Rushton*, SPEA (IUB); Brian Steensland*, Sociology (IUB); Robert Strikwerda, Philosophy (IUK); Andrea Walton*, Education (IUB); Mark Wilhelm*, Economics

Assistant Professors

Hayley Froysland, History; Beth Gazley, SPEA (IUB); Lauren Morris MacLean*, Political Science; Yue (Jen) Shang, SPEA (IUB); Ye Zhang, Economics

Emeritus Faculty

Constance M. Baker, Mary Anne Baker, Gerald L. Bepko, Edmund Byrne, Anne Donchin, Lawrence J. Friedman, Roger Hamburg, Giles Hoyt, Peter P. Jacobi, Lawrence Lambert, Angela McBride, Paul Nagy, Robert L. Payton, Jeanne Peterson, Jan B. Shipps, Sheldon Siegel, David H. Smith, Richard C. Turner, Carl H. Ziegler

Director of Graduate Programs

Dwight Burlingame*, Center on Philanthropy, (317) 278-8926

Courses

PHST–P 501 The Philanthropic Tradition I (3 cr.) These interdisciplinary courses will examine the core values of philanthropy and the principal patterns of philanthropic behavior and organization with particular emphasis on

the Western tradition and the American adaptation of it. Permission of the instructor required.

PHST–P 502 The Philanthropic Tradition II (3 cr.) These interdisciplinary courses will examine the core values of philanthropy and the principal patterns of philanthropic behavior and organization with particular emphasis on the Western tradition and the American adaptation of it. Permission of the instructor required.

PHST–P 512 Human and Financial Resources for Philanthropy (3 cr.) This course is designed to familiarize beginning graduate students with the three major areas subsumed under resources of the independent sector: volunteers, grantmaking, and financial resources obtained through a fundraising program. The course will be divided into four parts to include the theoretical framework for the sector; government, corporate, and foundation resources; charitable donations by individuals; and volunteer management.

PHST–P 521 The Nonprofit and Voluntary Sector (3 cr.) The theory, size, scope and functions of the nonprofit and voluntary sector are covered from multiple disciplinary perspectives including historical, political, economic and social. Same as SPEA V521.

PHST–P 523 Civil Society and Philanthropy (3 cr.) The course explores the relationship of civil society to the state, how the nonprofit sector affects the state and how the state regulates the sector. A continuing theme will be how and whether the state and philanthropic institutions make investments in strengthening civil society.

PHST–P 530 Topics in Philanthropic Studies (3 cr.) In-depth study of selected topics and issues in philanthropic studies. Specific topics vary from semester to semester. Course may be repeated once for credit, provided that the topic is different. Variable title approval requested.

PHST–P 535 Law of Nonprofit Organizations (3 cr.) This seminar examines major aspects of the legal regulation of nonprofit organizations and other legal issues affecting them. Topics include the formation, operation, and governance of nonprofit organizations, the duties and liability of officers and directors, charitable solicitation, tax-exempt status for public benefit and mutual benefit organizations, charitable contributions, lobbying, and other related topics.

PHST–P 555 Readings in Philanthropic Studies (1–4 cr.) A tutorial course involving in-depth study and analysis of a specific topic in philanthropic studies, by arrangement with instructor. Permission of director required.

PHST–P 590 Internship in Philanthropic Studies (3 cr.) A course for the advanced student of philanthropy. Students work 10 hours per week for a voluntary association, applying knowledge gained in earlier courses to practical situations. Requirements include a journal and a substantial term paper.

PHST–P 600 M.A. Thesis in Philanthropic Studies (1–6 cr.)

PHST–P 602 Qualitative Methods for Third Sector Research (3 cr.) This course will examine the organization, design, and execution of multi-method, qualitative research with a special emphasis on third sector contexts. Specific tools for research, such as observation, interview, case study design, and document analysis will be examined through course readings, discussion, and the conduct of student projects.

PHST–P 660 Ethical, Moral, and Religious Aspects of Philanthropy (3 cr.) This doctoral seminar focuses on the major ethical and moral texts that explain and justify philanthropy. Emphasis is placed on the philosophy of philanthropy in comparative perspective, world traditions of social and religious conditions, and moral issues raised in philanthropy practice.

PHST–P 662 Historical and Cultural Perspectives of Philanthropy (3 cr.) This doctoral seminar focuses on the history of Philanthropy from earliest to contemporary times. Cross-cultural perspectives are considered as socially and historically conditioned. Ethnic and gender philanthropy are examined across geographic, cultural, and chronological periods.

PHST–P 664 Philanthropy and Nonprofit Organizations in Society (3 cr.) Social, psychological, political, and economic theories are used to explain philanthropy and the practice of philanthropy through organizations in society. Major theoretical concepts such as contract failure, social origins theory, voluntary failure, and serial reciprocity presented along with other.

PHST–P 690 Research in Philanthropic Studies (1–3 cr.) P: One semester of M.A. course work. Students will research specialized topics related to philanthropic studies agreed upon with the instructor from and in their chosen disciplinary perspective. In some instances, team research may be carried out. The course may be repeated once with approval by the chair of philanthropic studies.

PHST–P 696 Topics in Biomedical Ethics (3 cr.) Topics in biomedical ethics focusing on variable issues, such as the healthcare needs of medically underserved people, responsibilities toward such groups, and evaluation of proposals to restructure the bioethical framework to rectify institutionalized injustices in research proprieties and medical practice. The course may be repeated for credit when topics vary.

PHST–P 790 Advanced Research Seminar in Philanthropic Studies (3 cr.) This doctoral seminar examines epistemological issues and tools, synthesizes the ways of knowing, and assesses forces that affect the conduct and use of knowledge in philanthropic studies. Multiple disciplinary perspectives and contemporary theoretical foundations of philanthropic studies are used to design and critique potential dissertation projects.

PHST–P 890 Dissertation (arr. cr.) Research and writing dissertation.

PHST–G 901 Advanced Research (6 cr.)

Philosophy

School of Liberal Arts

Departmental URL: www.iupui.edu/~philosop

Program URL: http://liberalarts/iupui.edu/philosophy/

Departmental E-mail: jeberl@iupui.edu

Curriculum

Degrees Offered

Master of Arts in Philosophy, joint Master of Arts/Doctor of Jurisprudence (with the School of Law), joint Master of Arts/Doctor of Medicine (with the School of Medicine), Graduate Certificates in Bioethics and American Philosophy

Master of Arts in Philosophy

The Department of Philosophy M.A. program offers three concentrations: American Philosophy, Bioethics, and International Research Ethics.

Special Departmental Requirements

Admission Requirements

Applicants are expected to have a bachelor's degree from an accredited university or its equivalent, with a grade point average of at least 3.0 overall (on a 4.0 scale) and at least 3.0 in the student's major. There is no specific major requirement, but applicants must show a record of course work (or equivalent experience), demonstrating that they are sufficiently prepared to do graduate work in philosophy. For applicants interested in the bioethics track, professional training or experience that involved health care ethics could be accepted in lieu of coursework. Applicants must also show an appropriate level of achievement on the Graduate Record Examination (GRE) General Test.

Program Requirements

Students are required to take a minimum of 30 credit hours. Students must complete a set of core courses as well as a set of concentration-specific courses. Students in the American Philosophy and Bioethics concentrations may apply to write a 6 cr. thesis in place of two 3 cr. graduate courses; students in the International Research Ethics concentration must complete a practicum and capstone research project. Students must attend and complete these courses at IUPUI, except those courses accepted for transfer. At least 15 credit hours must be taken at IUPUI. No course with a grade lower than a B will count toward the degree.

American Philosophy Concentration

Philosophy Core (6 cr. required)

- PHIL P525 Topics in the History of Philosophy (3 cr.)
- PHIL P540 Contemporary Ethical Theories (3 cr.) Note: P540 is a required course for students in the Bioethics track.
- PHIL P543 Contemporary Social and Political Philosophy (3 cr.)
- PHIL P553 Philosophy of Science (3 cr.)
- PHIL P560 Metaphysics (3 cr.)
- PHIL P562 Theory of Knowledge (3 cr.)

Concentration-specific Courses (18 cr. required)

1. Required foundational course (3 cr.) PHIL P558 American Philosophy (3 cr.)
2. Concentration-specific electives (9 cr. required) P503 The Semiotics of C. S. Peirce (3 cr.) P507 American Philosophy and the Analytic Tradition (3 cr.) P514 Pragmatism (3 cr.)P549 Bioethics and Pragmatism (3 cr.)P590 Intensive Reading (1-4 cr.) [When content is track-specific]P600 Topics in Philosophy (3 cr.) [When content is track-specific]P650 Topics in Semiotic Philosophy (3 cr.)P701 Peirce Seminar (3 cr.)P730 Seminar in Contemporary Philosophy (4 cr.) [When content is track-specific]P748 Seminar in American Philosophy (3 cr.)
3. Open electives (6 cr. required)These include all of the previous courses, as well as all other graduate courses offered in the IUPUI Department of Philosophy. The latter include: PHIL P520 Philosophy of Language (3 cr.), PHIL P542 Ethics and Values of Philanthropy (3 cr.)

Thesis or Research Project (6 cr. required)

- PHIL P803 Master's Thesis in Philosophy (6 cr.)

In lieu of a thesis students may opt for six credits of concentration specific electives.

Bioethics Concentration

Philosophy Core (6 cr. required)

1. Required foundational course (3 cr.): PHIL P540 Contemporary Ethical Theories (3 cr.)
2. Core electives (3 cr. required): PHIL P525 Topics in the History of Philosophy (3 cr.); PHIL P543 Contemporary Social and Political Philosophy (3 cr.); PHIL P553 Philosophy of Science (3 cr.); PHIL P560 Metaphysics (3 cr.); PHIL P562 Theory of Knowledge (3 cr.)

Concentration-specific Courses (18 cr. required)

1. Required foundational course (3 cr.)PHIL P547 Foundations of Bioethics (3 cr.)
2. Concentration-specific electives (15 cr. required)
    - Areas of central importance (5 cr. required): PHIL P548 Clinical Ethics Practicum (3 cr.); LAW DN838 Bioethics and Law (2 cr.); MHHS M504 Introduction to Research Ethics (3 cr.)
    - Specialized electives (9 cr. required): ANTH E445 Medical Anthropology (3 cr.); COMM C510 Health Provider-Consumer Communication (3 cr.); HIST H546 History of Medicine (3 cr.); LAW DN761 Law and Public Health (2 cr.); LAW DN845 Financing and Regulating Health Care (3 cr.); NURS N534 Ethical and Legal Perspectives in Advanced Nursing Practice (2 cr.); PHIL P549 Bioethics and Pragmatism (3 cr.); PHIL P555 Ethical and Policy Issues in International Research (3 cr.); PHIL P590 Intensive Reading (1-4 cr.) [When content is track-specific]; PHIL P600 Topics in Philosophy (3 cr.) [When content is track-specific]; PHIL P696 Topics in Biomedical Ethics (3 cr.); PHIL P730 Seminar in Contemporary Philosophy (4 cr.) [When content is track-specific]; SOC R515 Sociology of Health and Illness (3 cr.); SOC S560 Topics: Death and Dying (3 cr.)

Thesis or Research Project (6 cr. required)

- PHIL P803 Master's Thesis in Philosophy (6 cr.)

In lieu of a thesis students may opt for a six-credit-hour research project, completed under the guidance of an appropriate faculty committee. Examples of admissible research projects: research that leads to a paper of sufficient length and quality to be considered for publication in a peer-reviewed journal; a comprehensive briefing paper for a legislative hearing; and analysis of a hospital, institutional, or research policy.

In lieu of the above, students may also opt for six credits of general electives; i.e., any graduate course offered by the IUPUI Philosophy Department.

International Research Ethics Concentration

Core Courses (10 cr. required)

- PHIL P540 Contemporary Ethical Theories (3 cr.)
- PHIL P547 Foundations of Bioethics (3 cr.)
- PHIL P555 Ethical and Policy Issues in International Research (3 cr.)
- MHHS M510 Culture, History and Contemporary Health in Africa (1 cr.)

Concentration-specific Courses (12 cr. required)

- ANTH E445 Medical Anthropology (3 cr.)
- HIST H546 History of Medicine: Global Health and History (3 cr.)
- LAW DN696 AIDS: Ethical, Legal, and Policy Issues (2 cr.)
- LAW DN761 Law and Public Health (2 cr.)
- LAW DN813 International Human Rights (2 cr.)
- LAW DN838 Bioethics and Law (2 cr.)
- MHHS M504 Introduction to Research Ethics (3 cr.)
- PHIL P549 Bioethics and Pragmatism (3 cr.)
- PHIL P553 Philosophy of Science (3 cr.)
- PHIL P600 Topics in Philosophy: Philosophy of Medicine (3 cr.)
- PHIL P696 Topics in Biomedical Ethics (3 cr.)
- SOC R515 Sociology of Health and Illness (3 cr.)

Practicum/Research Project (8 cr. required)

- PHIL P550 International Research Ethics Practicum Orientation (1 cr.)
- PHIL P551 Practicum in International Research Ethics (5 cr.)
- PHIL G901 Advanced Research: IU-Moi AREP Capstone (2 cr.)

Joint Degrees

Master of Arts in Philosophy and Doctor of Jurisprudence in the School of Law

This joint degrees program, in which 12 hours of course work are creditable toward both degrees (provided the degrees are received simultaneously), affords the opportunity to earn both a Doctor of Jurisprudence (with an optional concentration in health law) and a Master of Arts in Philosophy (with a concentration in bioethics) while completing a total of only 108 credit hours. Program requirements include:

1. 90 hours credited in the School of Law, including all its required course work; and
2. 30 hours credited in the Department of Philosophy, including all of its required course work; and
3. a cumulative grade point average of at least 2.3 on all work done in the School of Law and at least 3.0 on all work done in the Department of Philosophy.

Master of Arts in Philosophy and Doctor of Medicine in the School of Medicine

The Department of Philosophy and the IU School of Medicine offer combined degrees in Medicine (MD) and Philosophy (MA), with a concentration in bioethics. Through the combined degrees program, the two degrees can be obtained with a total of 181 credits of coursework rather than the 194 credits required if the two degrees are obtained independently. Furthermore, the IU School of Medicine requires students to achieve a level 3 (the mastery level of competence) in three of the nine competencies that comprise the IUSM curriculum in order to be eligible for graduation. The combined degrees program provides participating students with the opportunity to achieve a level 3 in the Moral Reasoning and Ethical Judgment competency.

Ph.D. Minor

To earn a doctoral minor at IUPUI, the student must earn 12 credit hours of graduate courses in philosophy, with a grade point average of at least 3.0 (B), including 6 credit hours in courses selected from the Philosophy Core (P525, P540, P543, P553, P560, P562).

Graduate Certificates

The department offers two graduate certificates, one in American Philosophy and one in Bioethics.

Admission Requirements

Applicants are expected to have a bachelor's degree from an accredited university or its equivalent, with a grade point average of at least 3.0 overall (on a scale of 4) and at least 3.0 in the student's major. There is no specific major requirement, but applicants must show a record of coursework (or equivalent experience) demonstrating that they are sufficiently prepared to do graduate work in philosophy. Acceptable coursework includes an undergraduate degree in philosophy. For their application, students are required to submit in addition to their application form: a statement of purpose, official transcripts, and at least one letter of recommendation.

Program Requirements

To complete the certificate students should take 15 credit hours in the IU system, at least 9 of which must be taken at the IUPUI campus. All courses must be at the 500-level or higher and be completed with a grade B or higher. Students for the American Philosophy certificate are required to take PHIL P558, whereas students for the Bioethics certificate are required to take PHIL P547. In addition, students should take nine credit hours in concentration-specific courses (module 2), while taking the remaining three credit hours either in concentration-specific courses (module 2) or in courses that fall within the MA core (module 1).

Faculty

Chairperson
Professor John J. Tilley*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Michael B. Burke* (Emeritus), Edmund Byrne* (Emeritus), André De Tienne, Anne Donchin* (Emerita), Richard Gunderman* (Philosophy, Radiology, Philanthropy, and Medical Humanities), Nathan R. Houser* (Emeritus), Laurence Lampert* (Emeritus), Michael A. McRobbie*, Eric M. Meslin* (Philosophy and Medicine), Paul Nagy* (Emeritus, Philosophy and American Studies), John J. Tilley*

Associate Professors

Peg Brand, Cornelis de Waal, Jason T. Eberl, Timothy D. Lyons, Ursula Niklas Peterson*

Assistant Professors

Chad Carmichael, Martin Coleman, Peter H. Schwartz (Medicine)

Courses

PL–P 503 The Semiotics of C. S. Peirce (3 cr.) A general introduction into the semiotics of C. S. Peirce.

PL–P 507 American Philosophy and the Analytic Tradition (3 cr.) An overview of the development of American philosophy with a special focus on its contribution to and influence on the American analytic tradition. This course discusses the views of such philosophers as C. I. Lewis, Rudolph Carnap, W. V. O. Quine, Donald Davidson, Hillary Putnam, and Susan Haack.

PL–P 514 Pragmatism (3 cr.) This course examines what pragmatism stood for in its formative years and what it has become; then, after studying some conflicting views of well-known pragmatists, it considers what pragmatism might become. Part of the course is devoted to the contributions of pragmatism to different areas within philosophy.

PL–P 520 Philosophy of Language (3 cr.) Advanced study of selected topics.

PL–P 525 Topics in the History of Philosophy (3 cr.) An advanced study of important themes or major figures in the history of philosophy.

PL–P 540 Contemporary Ethical Theories (3 cr.) Fundamental problems of ethics in contemporary analytic philosophy from G. E. Moore's Principia Ethica to the present.

PL–P 542 The Ethics and Values of Philanthropy (3 cr.) An inquiry into the ethics and values of philanthropy rooted in a general understanding of philanthropy, as voluntary action for the public good, as an ethical ideal. A consideration of philanthropic activity in light of this ideal.

PL–P 543 Contemporary Social and Political Philosophy (3 cr.)

PL–P 547 Foundations of Bioethics (3 cr.) A rigorous examination of bioethical theory and practice. Stress is placed on moral and conceptual issues embedded in biomedical research, clinical practice, and social policy relating to the organization and delivery of health care.

PL–P 548 Clinical Ethics Practicum (3 cr.) Application of the methods of philosophical analysis to current ethical issues arising in IU-affiliated hospitals and clinics. The practicum gives students firsthand experience of clinical ethics problems in "real time," showing them both the need for conceptual frameworks and the difficulties associated with them.

PL–P 549 Bioethics and Pragmatism (3 cr.) A survey of recent contributions of American philosophy to bioethics. The course strongly focuses on a growing group of philosophers and ethicists who seek their inspiration in Dewey, James, Peirce, Royce, and Mead, while dealing with contemporary issues in medical ethics.

PL–P 553 Philosophy of Science (3 cr.) A study of theories with regard to the nature, purpose, and limitations of science. Attention is given to the cognitive significance of theories, the scientific method (hypothesis formation, theory construction, and testing), research paradigms, reductionism, and social epistemology.

PL–P 555 Ethical and Policy Issues in International Research (3 cr.) Examines ethical and policy issues in the design and conduct of transnational research involving human participants. Topics discussed include economic and political factors; study design; the role of ethics review committees; individual and group recruitment/ informed consent; end of study responsibilities; national and international guidelines.

PL–P 558 American Philosophy (3 cr.) General introduction to American philosophy.

PL–P 560 Metaphysics (3 cr.) In-depth discussion of representative contemporary theories.

PL–P 562 Theory of Knowledge (3 cr.) Advanced study of selected topics.

PL–P 590 Intensive Reading (1–4 cr.) A tutorial course involving in-depth consideration of a specific philosophical area or problem or author.

PL–P 600 Topics in Philosophy (3 cr.) A detailed examination of a specific topic in philosophy.

PL–P 650 Topics in Semiotic Philosophy (3 cr.) An examination of various historical and theoretical issues arising from the philosophical study of semiosis—the general phenomenon of representation, objectification, signification, and interpretation—through the work of mostly American philosophers from the late nineteenth century to the present, with an emphasis on the impact of Peirce's semiotic philosophy.

PL–P 696 Topics in Biomedical Ethics (3 cr.) Selected topics in bioethics, such as international research ethics; ethical issues in pediatrics; ethical issues in genetics.

PL–P 701 Peirce Seminar (3 cr.) This course is designed to give students a firm and broad understanding of the philosophy of Charles S. Peirce.

PL–P 730 Seminar in Contemporary Philosophy (4 cr.) Selected topics on the works of twentieth-century philosophers.

PL–P 748 Seminar in American Philosophy (3 cr.) Different topics course that students can take repeatedly for credit. Sample topics include American Phenomenology (De Tienne), American Realism (De Waal), Emerson (Hanson), James (Nagy), Royce (De Tienne), Dewey (Nagy), and Mead (De Waal).

PL–P 803 Master's Thesis in Philosophy (arr cr.)

ANTH–E 445 Medical Anthropology (3 cr.) A cross-cultural examination of a biocultural systems model of human adaptation in health and disease, including the interaction of biology, ecology, and culture in health; ethnomedical systems in the cross-cultural conception, presentation, diagnosis, and treatment of disease; and sociocultural change and health. This course has been approved for graduate credit.

CMCL–C 510 Health Provider-Consumer Communication (3 cr.) This course is designed to teach communication skills and practices related to health care talk by examining transactional communication within health care contexts. Topics covered in this course focus directly upon interpersonal dialogue between health care providers and patients.

HIST–H 546 History of Medicine (3 cr.) History of medicine and public health in Europe and America, including ancient and medieval background, with focus on the development of modern health sciences since 1800.

LAW–DN 761 Law and Public Health (2 cr.) Covers the law governing the practice of public health by state, local, and federal agencies, as well as health care professionals and institutions. Topics addressed include legal mandates on public health care agencies, physician, and other health practitioners regarding testing, reporting, and contact tracing with respect to specific diseases, as well as laws for the imposition of quarantine, civil commitment, and mandatory treatment. Also covered are public health aspects of the regulation of health care institutions, legal issues associated with risk assessment and cost-benefit analysis, along with the environment.

LAW–DN 838 Bioethics and Law (2 cr.) The course considers the role of law in bioethics and how the law in bioethics is shaped by the interplay of ethical principles, medical considerations, and social forces. Topics that will be covered include the refusal of life-sustaining treatment, physician-assisted suicide, organ transplantation, abortion, the balance between individual liberty and protection of the public health, access to health care, and rationing of health care. An important theme of the course will be to consider the extent to which individuals have—and should have—control over medical decision making.

LAW–DN 845 Financing and Regulating Health Care (3 cr.) Covers selected legal issues in financing and regulation of the American health care system. The course emphasizes chief policy issues facing the American health care system today: cost, access, and quality of health care services for all Americans.

MHHS–M 504 Introduction to Research Ethics (3 cr.) Ethical issues in designing, conducting, analyzing and presenting research; includes historical and theoretical background as well as case studies of such issues as scientific misconduct, data management and reporting, publication practices, intellectual property, funding of research and conflict of interest, human subject research and institutional review boards, and public perceptions of science.

NURS–N 534 Ethical and Legal Perspectives in Advanced Nursing Practice (2 cr.) This course discusses and analyzes major ethical and legal terms and the principles underlying legal and ethical health care practices. Students analyze selected theories/concepts/principles of ethics and law within a framework of ethical decision making in advanced nursing practice.

SOC–R 515 Sociology of Health and Illness (3 cr.) Surveys important areas of medical sociology, focusing on social factors influencing the distribution of disease, help-seeking, and health care. Topics covered include social epidemiology, the health care professions, socialization of providers, and issues of cost and cost containment.

SOC–S 560 Topics in Sociology (Death and Dying) (3 cr.) This course explores the human confrontation with mortality from a social, historical, and moral perspective. Topics to be discussed include Western attitudes towards death, medicalization of dying, human implications of high-tech dying, the right-to-die movement, funeral rituals, the death of children, and the violent death of suicide and genocide.

Political Science

School of Liberal Arts

Departmental E-mail: mferguso@iupui.edu

Departmental URL: www.iupui.edu/~polisci

Curriculum

Degrees Offered

Master of Arts

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Applications will be considered all year round. Admission requirements include an undergraduate major in political science, or its equivalent, with a GPA of 3.0 or better, the Graduate Record Examination, with average scores on the General Test of 500 with at least one score of 550 or better, a personal statement and three letters of support.

Foreign Language Requirement

There is no foreign language requirement.

Grades

Students must maintain a 3.0 (B) grade point average, and receive minimum course grades of 2.8 (B-).

Master of Arts Degree

Course Requirements

A minimum of 33 credit hours made up of the core courses (12 credit hours). All students must complete the following:

- POLS Y570 Introduction to the Study of Politics (3 cr.)*
- POLS Y580 Research Methods in Political Science (3 cr.)*

- POLS Y620 State Politics (3 cr.)
- POLS Y622 Urban Politics (3 cr.)

Electives (9-12 hours). Approved electives may be taken from any department. Approved Political Science courses currently include the following:

- POLS Y624 Indiana Politics (3 cr.)
- POLS Y630 State Executive Politics (3 cr.)
- POLS Y640 State Parties and Interest Groups (3 cr.)
- POLS Y642 Comparative Federalism (3 cr.)
- POLS Y661 American Politics (3 cr.)*
- POLS Y680 Readings in Political Science (1-6 cr.)

An internship (3-6 hours) with a state, local, or government institution, or with a body having operational ties with such an institution. Students must enroll in POLS Y881*, Internship in Political Science. A thesis (6 hours) exploring some aspect of state, local or urban politics. Students must enroll in POLS Y880, M.A. Thesis. Students are strongly advised to allow at least one year for the preparation, completion and defense of a thesis. (An asterisk* after a course denotes final approval is pending.)

Final Examination

There is no final examination.

Faculty

Chairperson

Associate Professor Margaret Ferguson

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

William Blomquist, Bessie House-Soremekun, John McCormick*, Brian Vargus*

Associate Professors

Ramla Bandele, Margaret Ferguson, Scott Pegg*

Assistant Professors

Johnny Goldfinger, Aaron Dusso, Thomas Mustillo, David Weiden

Director of Graduate Studies

Professor John McCormick*, Cavanaugh Hall 503H, (317) 274-4066

Courses

POLS–Y 570 Introduction to the Study of Politics (3 cr.) * Problems of graduate study and professional scholarship; central organizing concepts and the use of theory in political science and related disciplines; specialized areas of research and scholarship in political science; conditions of scientific inquiry and methodological problems in the study of political phenomena; central importance of theory in explanation.

POLS–Y 580 Research Methods in Political Science (1–3 cr.) *

POLS–Y 620 State Politics (3 cr.) An examination of the institutions and processes by which state governments carry out their responsibilities. Includes the study of executives, legislatures, parties, and elections at the state level.

POLS–Y 622 Urban Politics (3 cr.) An examination of—and the problems faced and challenges faced by—the governments of cities and metropolitan areas. Includes study of leadership, citizen participation, intergovernmental relations, and urban policy.

POLS–Y 624 Indiana Politics (3 cr.) This seminar reviews contemporary scholarship on the development, context, structure, and operation of Indiana Government and politics. It places Indiana politics into both a historical and comparative perspective to see how Indiana politics have changed over time and how they compare to politics in other states.

POLS–Y 630 State Executive Politics (3 cr.) A course that examines the role of governors in state politics. Includes the study of leadership and the relationship between the executive and other elements of government at the subnational level.

POLS–Y 640 State Parties and Interest Groups (3 cr.) An examination of political parties and interest groups, their roles in government, and their structure and organization.

POLS–Y 642 Comparative Federalism (3 cr.) A course that places federalism in its comparative context. Assessing theories and models of federalism in North American, Europe, Asia, and other parts of the world.

POLS–Y 661 American Politics (3 cr.) * Illustrative topics: the presidency, legislative process, political behavior, political parties and representation, political socialization, comparative state politics, urban politics, bureaucratic politics.

POLS–Y 680 Readings in Political Science (1–6 cr.) This course allows a student and faculty member to craft a course of study to suit the student's particular academic needs.

POLS–Y 880 M.A. Thesis (1–6 cr.)

POLS–Y 881 Internship in Political Science (1–6 cr.) * A course in which students complete an internship for credit with a government (or related) institution. It will be arranged between the student and the instructor (requirements will vary depending on student/instructor agreement).

Professional Editing

School of Liberal Arts

Departmental E-mail: iat@iupui.edu

Departmental URL: http://liberalarts.iupui.edu/directory/role/PROFED

Curriculum

Degree Offered
Graduate Certificate

An interdisciplinary 15 credit hour research certification covering the fundamental theories and methods involved in the practice of scholarly editing and other more general

applications of professional editing. The interdepartmental curriculum includes editing concentrations in English, history, and journalism and is administered by graduate faculty of the scholarly editions consortium within the School of Liberal Arts.

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Students already admitted into Indiana University or Purdue University graduate degree programs are automatically eligible to earn a certificate. Such students must declare their participation in the degree program and also submit a statement of interest. Continuing graduate nondegree students must meet the following requirements: (1) a bachelor's degree from an accredited college or university, with the expectation of a minimum 3.0 overall GPA (on a scale of 4.0) and a minimum 3.0 average GPA in the student's major, (2) a statement of interest, and (3) three letters of recommendation. There is no specific major requirement, but candidates should have a record of course work to demonstrate sufficient writing and research experience. Foreign applicants are required to take the Test of English as a Foreign Language (TOEFL) and receive a score of 550 or above. They are also required to take an on-campus exam for English proficiency before beginning course work and may be required to take additional classes in English as a Second Language.

Foreign Language/Research-Skill Requirement

None.

Grades

Certificate students must maintain at least a 3.0 (B) grade point average.

Course Requirements

A minimum of 15 credit hours, which include completion of any one of several three-course core concentrations (9–12 credit hours) and one or more open electives (3–6 credit hours). Normally, 9 credit hours can be taken before admission to the certificate program, provided that all course work is completed within a four-year period. For course descriptions, see the course listings for the Departments of English and History at Indiana University–Purdue University Indianapolis.

Core Options

Three courses (9–12 credit hours) in one of the following field concentrations:

Scholarly Editing Concentration I: Critical (Eclectic) Texts (12 credit hours)

- L501 Professional Scholarship in Literature [English] (4 cr.)
- L680 Topics: Textual Theory and Textual Criticism [English] (4 cr.)
- L701 Descriptive Bibliography and Textual Problems [English] (Bloomington campus) (4 cr.)

Scholarly Editing Concentration II: Documentary Texts (11 credit hours)

- H501 Historical Methodology [History] (4 cr.)
- H543 Internship: Practicum in Public History [History] (4 cr.)
- H547 Topics in Public History: Historical Editing [History] (3 cr.)

Technical Editing Concentration (9-10 credit hours)

- W531 Designing and Editing Visual Communication [English] (3 cr.)
- W532 Managing Document Quality [English] (3 cr.)
- W609 Directed Writing Project (arranged individual editing project with the IUPUI scholarly editions consortium, 3-4 cr.)

Open Elective Course(s)

One or two courses (3–6 credit hours), depending on the number of credit hours required to meet the 15 credit hour certificate minimum after completion of the chosen core concentration. Any of the core options listed previously (outside of the student's chosen field concentration) may be counted as an open elective, as well as any of the following courses (for course descriptions, see the course listings for the Departments of English and History at Indiana University–Purdue University Indianapolis).

- I501 Introduction to Informatics [Informatics] (3 cr.)
- I502 Information Management [Informatics] (3 cr.)
- J560 Topics Colloquium [Journalism]: Writing, Editing, and Designing for the World Wide Web (3 cr.), Digital Photography (3 cr.), or Informational Graphics (3 cr.)
- J563 Computerized Publication Design I [Journalism] (3 cr.)
- J565 Computerized Publication Design II [Journalism] (3 cr.)
- L505 Organization and Representation of Knowledge and Information [SLIS] (3 cr.)
- L515 History of the Book [SLIS] (3 cr.)
- L585 Descriptive Bibliography [SLIS] (3 cr.)
- L590 Internship in English [English] (4 cr.)
- N501 Principles of Multimedia Technology [New Media] (3 cr.)
- W525 Research Approaches for Technial and Professional Communication (4 cr.)

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Director

William F. Touponce*, Institute for American Thought (Liberal Arts), CA 545, (317) 274-0081; e-mail: wtouponc@iupui.edu

Professors

Jonathan R. Eller* (English), William F. Touponce* (English), Marianne Wokeck* (History)

Associate Professor

Marge Rush Hovde (English)

Social Work

School of Social Work

Departmental URL: http://www.indiana.edu/~iussw/social_work/

Departmental E-mail: swkphd@iupui.edu

Curriculum

Degree Offered

Doctor of Philosophy. The School of Social Work also offers the Master of Social Work degree on the Indianapolis, IUN/Gary, Fort Wayne, Richmond, and South Bend campuses. For further information on the M.S.W. program, see the School of Social Work Bulletin.

Doctor of Philosophy Degree

Admission Requirements

All applicants to the Ph.D. program must have a master's degree in social work or a related field of study. Admission to the Ph.D. program is based on evaluations of: (1) the applicant's professional resume, (2) professional experience beyond the M.S.W. degree, (3) undergraduate and graduate transcripts, (4) three letters of reference, (5) an example of the applicant's scholarly writing, (6) a 500-word statement of purpose, and (7) Graduate Record Examination General Test scores.

Application Deadlines

Applications are accepted at any time, but a deadline of February 1 is required in order to be considered for a University Fellowship. Applications are preferred by April 1 to be considered for admission to the program for the following fall semester. Application materials and further information may be obtained from the program director.

Course Requirements

A total of 90 credit hours, including dissertation and research internship. Up to 30 graduate credit hours may be counted toward the minimum 90 credit hours required for the Ph.D. degree. All courses credited toward the Ph.D. degree must have a minimum grade of B and must receive written approval of the School of Social Work Ph.D. Program Committee and the dean of the University Graduate School. Specific program requirements include: (1) professional social work component (27 credit hours), (2) specialization component (18 credit hours), (3) research component (27 credit hours), (4) research internship (6 credit hours), (5) dissertation (12 credits). See also the "Requirements for the Degree Doctor of Philosophy" discussed in the first section of this bulletin.

Advisory Committee

All students in the Ph.D. program, with the approval of the program director, will select an advisory committee of three faculty members, one of whom will represent the student's area of specialization outside the School of Social Work.

Qualifying Examination

Comprehensive; specific focus and scheduling determined by the student's advisory committee.

Research Proposal

After nomination to candidacy, the student, with the approval of the program director, will select a research committee of no fewer than four faculty members, including an outside member. This committee must approve the proposed dissertation topic.

Final Examination

Oral defense of dissertation.

Pre-Doctoral Exploratory Option

This option is designed to provide prospective Ph.D. students with an opportunity to explore their interests in research and doctoral education before making formal application to the Ph.D. program. Qualified students are admitted under a "special student" status (M9) and are permitted to enroll in up to three of the school's regular Ph.D. foundation courses (9 credit hours) before having to decide whether they intend to apply to the Ph.D. program. If later accepted to the Ph.D. program, credits earned during the pre-doctoral phase will automatically apply toward the Ph.D. degree. Participation in the Pre-Doctoral Exploratory Option does not guarantee acceptance into the Ph.D. program. Applications for the Pre-Doctoral Exploratory Option should be submitted by May 1 for fall admission and by November 1 for spring admission. All inquiries regarding the pre-doctoral option should be directed to the academic advisor listed above.

Ph.D. Minor in Social Work

A minor in social work requires the completion of at least 12 credit hours of graduate course work. Students must complete either S730 or S740 and at least one additional course from among the 700-level courses listed below. Remaining course requirements may be taken from among the school's 500- and 600-level courses with the approval of the director of the M.S.W. program and the course instructor. The choice of courses comprising the minor must be made in consultation with the Ph.D. program director and have the approval of the student's identified faculty advisor.

Faculty

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Margaret E. Adamek*, William H. Barton*, Barry R. Cournoyer, Chuck Davis, Gail Folaron, Darlene Lynch, (Northwest), Virginia Majewski*, Michael Patchner*, Cathy K. Pike*, Gerald T. Powers* (Emeritus), Irene R. Queiro-Tajalli*, W. Patrick Sullivan*

Associate Professors

Robert B. Bennett, Carolyn Black*, Lorraine C. Blackman, Kathy V. Byers, Frank Caucci (Northwest), Mark Crouch,

James G. Daley*, Lynn Duggan, , Carol Hostetter*, Hea-Won Kim*, Lisa E. McGuirePaul Mishler (South Bend), Paul Newcomb (South Bend),), Philip Ouellette*, Theresa Roberts, Sabrina W. Sullenberger , Robert Vernon*

Assistant Professors

Stephanie Boys, Chris Cotten, Carolyn Gentle-Genitty, M. Thandabantu Iverson, Khadija Khaja, Kathy Lay*, Carmen Luca Sugawara, William Mello, Marilynne Ramsey (South Bend), , Jeffry Thigpen, Mark Thomas (Northwest), Denise Travis (Northwest), Joe Varga, Markita Walker

Academic Advisor

Professor Margaret E. Adamek, Indiana University School of Social Work, 902 W. New York Street, Indianapolis, IN 46202, (317) 274-6730, madamek@iupui.edu

Courses

SWK–S 501 Professional Social Work at the Master's Level: An Immersion (3 cr.) This foundation course provides an overview of social work, including the definition, scope, history, ethics, and values of the profession. This course will provide basic orientation to the available resources and expectations of graduate education in general, and the M.S.W. program in particular, all within the framework of the adult learner model. Students will develop basic communication, self-assessment, and reflection skills necessary for success in the M.S.W. program. Students will have an opportunity to survey various fields of practice and will begin to identify personal learning goals for their M.S.W. education as well as develop a commitment to lifelong learning as a part of professional practice.

SWK–S 503 Human Behavior in the Social Environment I (3 cr.) This course provides content on the reciprocal relationships between human behavior and social environments. It includes empirically based theories and knowledge that focus on the interactions between and within diverse populations of individuals, groups, families, organizations, communities, societal institutions, and global systems. Knowledge of biological, psychological, sociological, cultural, and spiritual development across the lifespan is included. Students learn to analyze critically micro and macro theories and explore ways in which theories can be used to structure professional activities. Concepts such as person-in-environment are used to examine the ways in which social systems promote or deter human well-being and social and economic justice.

SWK–S 505 Social Policy Analysis and Practice (3 cr.) This foundation policy course will focus on using several policy analysis frameworks to analyze current social policies and programs both at the state and federal levels and to develop policies that increase social and economic justice. Students will be expected to develop a range of policy practice skills to influence policy development within legislative, administrative, community, political, and economic arenas.

SWK–S 513 Human Behavior and the Social Environment II (3 cr.) (variable title) This course builds upon S503 and focuses on developing further knowledge of human behavior theories and their application to practice. Students will link course content to the concentration that the student has selected.

SWK–S 600 Seminar in Social Work (1–10 cr.) P: Second-year standing or permission of School. Intensive study of specific areas in social work.

SWK–S 663 Leveraging Organizations, Communities, and Political Systems (3 cr.) This course focuses on the knowledge and skills essential for understanding, analyzing, and application in organizations, communities, and political arenas. Such knowledge and skills include, but are not limited to: organizational theories, structures, and processes; examination and application of rural, urban, and virtual community models, themes, and practices; and understanding and involvement in political, social action, and social change interventions and empowerment practices.

SWK–S 665 Designing Transformational Programs (3 cr.) This course focuses on alternative, transformational models of strategic, community, and program planning. Featured development models center on collaboration, cultural competence, empowerment, and social justice. The course will address advanced grant writing, identification of funding and other resources, and philanthropic trends within a variety of social service delivery systems. It will move beyond a focus on the technology of program development, to examine planning as a vehicle for designing organizational, community, and social change.

SWK–S 682 Assessment in Mental Health and Addictions (3 cr.) Recognizing the social, political, legal, and ethical implications of assessment, students enrolled in this course critically examine various conceptual frameworks and apply biopsychosocial and strengths perspectives to understand its multidimensional aspects. Students learn to conduct sophisticated mental status and lethality risk interviews, engage in strengths and assets discovery, and apply the Diagnostic and Statistical Manual of the American Psychiatric Association and other classification schemes in formulating assessment hypotheses. They gain an understanding of the application of several relevant assessment instruments and learn to evaluate their relevance for service to at-risk populations, including persons affected by mental health and addictions issues. Students learn to collaborate with a diverse range of consumers and other professionals in developing meaningful assessments upon which to plan goals, intervention strategies, and means for evaluation.

SWK–S 710 Social Work Theories of Human and Social Behavior (3 cr.)

SWK–S 720 Philosophy of Science and Social Work (3 cr.)

SWK–S 721 Preparing to Publish: Seminar in Advanced Scholarship Skills (3 cr.)

SWK–S 724 Theory, Practice, and Assessment of Social Work Teaching (3 cr.)

SWK–S 726 Advanced Social Work Research: Qualitative Methods (3 cr.)

SWK–S 727 Advanced Social Work Research: Quantitative Methods (3 cr.)

SWK–S 728 Advanced Statistics for Social Work (3 cr.)

SWK–S 730 Proseminar on Social Work Policy Analysis (3 cr.)

SWK–S 740 Social Work Practice: Theory and Research (3 cr.)

SWK–S 790 Special Topics in Social Work Practice, Theory, and Research (1–3 cr.)

Ph.D. Social Work

In addition to the required courses listed below, all students must complete a minimum of 12 credit hours outside the School of Social Work related to their area of specialization. An advanced course in measurement and statistics is also required and is typically taken as part of the student's area of specialization. All students must enroll for 6 elective credits, which may be taken within or outside the School of Social Work with the approval of the student's advisory committee.

SWK–S 710 Social Work Theories of Human and Social Behavior (3 cr.) This seminar focuses on the converging forces that have shaped the development, dissemination, and utilization of the human-behavior knowledge base of social work. It specifically examines the social and behavioral science theory and research that provide the foundation for social work practice across a variety of system levels.

SWK–S 720 Philosophy of Science and Social Work (3 cr.) This course examines the nature and sources of social work knowledge and considers a range of epistemological issues involved in the selection, development, evaluation, and use of knowledge for social work.

SWK–S 725 Social Work Research Internship (3 cr.) P: S720, S726, S727, or a foundation statistics course, and at least one of the following: S710, S730, or S740. This supervised field internship provides practical experience in conducting research relevant to social work practice. Students participate in a new or ongoing, faculty-supervised research project involving the design and implementation of a study, including the collection and analysis of data, and the development of appropriate research reports.

SWK–S 726 Advanced Social Work Research: Qualitative Methods (3 cr.) P: S720 and foundation statistics course. This course provides an opportunity for students to initiate a research project using qualitative research methods. Topics covered will include developing the research question, exploring the literature, writing an interview guide, interviewing, analyzing data, computer analysis, writing reports, subjectivity and bias, ethics, role of theory, trustworthiness, and audits.

SWK–S 727 Advanced Social Work Research: Quantitative Methods (3 cr.) P: S720 and foundation statistics course. This advanced quantitative research methods course prepares students with the knowledge and skills necessary to effectively engage in independent research, including: literature review, theory development, hypothesis testing, research design, data analysis, and report writing. It includes related computer applications and use of online data sources.

SWK–S 730 Proseminar on Social Work Policy Analysis (3 cr.) This seminar focuses on the development and application of analytical tools necessary to critically examine and evaluate social policy theory and research germane to social work, including the values and ideologies that undergird social problem construction, social policy creation, and social program design. Specific attention is devoted to the application of these schemata for diverse populations.

SWK–S 740 Social Work Practice: Theory and Research (3 cr.) This seminar provides an in-depth orientation to the place of research in social work. It focuses on epistemological, methodological, practical, and ethical issues which affect the way in which research relevant to the profession of social work is conducted and used.

SWK–S 791 Integrative Seminar I (1.5 cr.) This course acquaints incoming doctoral students with campus resources for graduate students and with the expectations for doctoral education, including the policies, procedures, and academic standards of the Graduate School and of the School of Social Work. Students register for this seminar in their first semester.

SWK–S 792 Integrative Seminar II (1.5 cr.) This course is intended to support Ph.D. students as they finish up doctoral coursework and prepare for their qualifying paper, dissertation, and subsequent professional career. Students register for this seminar in their last semester of coursework.

SWK–S 800 Dissertation Research (1–12 cr.)

SWK–S 712 International Social Development in a Global Context (3 cr.) This course is an advanced seminar for graduate students interested in developing an in-depth understanding of complex social problems in a global world. Students will have the opportunity to learn theories of development; critically analyze international agreements; and to explore and appropriately use social development models.

SWK–S 718 Intermediate Statistics for Social Workers (3 cr.) Students will learn selected parametric and nonparametric statistics to examine research problems. Included in the learning process are hand computations of statistics development of skills in using a comprehensive computer statistics package and selection of statistical techniques based on levels of measurement and analyses of the assumptions of statistics.

SWK–S 721 Preparing to Publish: Seminar in Advanced Scholarship Skills (3 cr.) This course prepares doctoral students for academic scholarship. Topics include expectations and standards for scholarly discourse, critical and analytical thinking skills, logical argument, scholarly writing and publication, and developing a research agenda. Web-based peer and instructor review of successive drafts of writing assignments culminate in a synthesized review of literature.

SWK–S 724 Theory, Practice, and Assessment of Social Work Teaching (3 cr.) This course prepares doctoral students to effectively and competently teach social work courses. Content includes teaching philosophies; curriculum and syllabus development; teaching methods; technology related to teaching; assessment, testing, evaluation of students; and research related to teaching. Students will learn accreditation

standards for bachelor's and master's social work education. Course goals will be accomplished using readings, written assignments, guest speakers, demonstrations of teaching, and class discussion.

SWK–S 728 Advanced Statistics for Social Work (3 cr.) P: S600 Intermediate Statistics for Social Work. Students in this course learn how to evaluate statistical assumptions and select, compute, and substantively interpret a variety of multivariate statistics, using SPSS to analyze actual social work research data. Online resources, Web-based materials, and model applications of the statistics support students' learning.

SWK–S 790 Special Topics in Social Work Practice, Theory, and Research Independent Studies (1–3 cr.) P: Approval by appropriate instructor. This course provides students with an opportunity to engage in focused study of a substantive area of social work practice directly related to the student's identified area of theoretical and research interest. It is completed with the approval and under the guidance of a member of the Ph.D. faculty.

SWK–S 805 Select Topics in Social Work (1–5 cr.)

Ph.D. Social Work

In addition to the required courses listed below, all students must complete a minimum of 12 credit hours outside the School of Social Work related to their area of specialization. An advanced course in measurement and statistics is also required and is typically taken as part of the student's area of specialization. All students must enroll for 6 elective credits, which may be taken within or outside the School of Social Work with the approval of the student's advisory committee.

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SWK–S 720 Philosophy of Science and Social Work (3 cr.) This course examines the nature and sources of social work knowledge and considers a range of epistemological issues involved in the selection, development, evaluation, and use of knowledge for social work.

SWK–S 725 Social Work Research Internship (3 cr.) P: S720, S726, S727, or a foundation statistics course, and at least one of the following: S710, S730, or S740. This supervised field internship provides practical experience in conducting research relevant to social work practice. Students participate in a new or ongoing, faculty-supervised research project involving the design and implementation of a study, including the collection and analysis of data, and the development of appropriate research reports.

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SWK–S 730 Proseminar on Social Work Policy Analysis (3 cr.) This seminar focuses on the development and application of analytical tools necessary to critically examine and evaluate social policy theory and research germane to social work, including the values and ideologies that undergird social problem construction, social policy creation, and social program design. Specific attention is devoted to the application of these schemata for diverse populations.

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SWK–S 792 Integrative Seminar II (1.5 cr.) This course is intended to support Ph.D. students as they finish up doctoral coursework and prepare for their qualifying paper, dissertation, and subsequent professional career. Students register for this seminar in their last semester of coursework.

SWK–S 800 Dissertation Research (1–12 cr.)

SWK–S 712 International Social Development in a Global Context (3 cr.) This course is an advanced seminar for graduate students interested in developing an in-depth understanding of complex social problems in a global world. Students will have the opportunity to learn theories of development; critically analyze international agreements; and to explore and appropriately use social development models.

SWK–S 718 Intermediate Statistics for Social Workers (3 cr.) Students will learn selected parametric and nonparametric statistics to examine research problems. Included in the learning process are hand computations of statistics development of skills in using a comprehensive computer statistics package and selection of statistical techniques based on levels of measurement and analyses of the assumptions of statistics.

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prepares doctoral students for academic scholarship. Topics include expectations and standards for scholarly discourse, critical and analytical thinking skills, logical argument, scholarly writing and publication, and developing a research agenda. Web-based peer and instructor review of successive drafts of writing assignments culminate in a synthesized review of literature.

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SWK–S 728 Advanced Statistics for Social Work (3 cr.) P: S600 Intermediate Statistics for Social Work. Students in this course learn how to evaluate statistical assumptions and select, compute, and substantively interpret a variety of multivariate statistics, using SPSS to analyze actual social work research data. Online resources, Web-based materials, and model applications of the statistics support students' learning.

SWK–S 790 Special Topics in Social Work Practice, Theory, and Research Independent Studies (1–3 cr.) P: Approval by appropriate instructor. This course provides students with an opportunity to engage in focused study of a substantive area of social work practice directly related to the student's identified area of theoretical and research interest. It is completed with the approval and under the guidance of a member of the Ph.D. faculty.

SWK–S 805 Select Topics in Social Work (1–5 cr.)

Survey Research

School of Liberal Arts

Departmental E-mail: igem100@iupui.edu

Departmental URL: liberalarts.iupui.edu/political_science/

Curriculum

Graduate Certificate in Survey Research Program

The Graduate Certificate in Survey Research Program provides an interdisciplinary approach to survey research in both theory and application. It encompasses a scholarly introduction to sophisticated techniques in survey research and the opportunity for a student to tailor the program to fit within their other graduate work.

Survey research has expanded with acceleration in the past three decades. It is now widely used across a number of disciplines. For example, it is used by medical researchers and public health specialists in epidemiological studies, evaluation of public information campaigns, and to assess behavioral and attitudinal risks for disease and injury. It is used by public administrators, in fields such as urban planning and criminal justice to evaluate current programs, assess the impact of public safety campaigns, and assess citizen support for new developments in public facilities. Educational leaders use surveys or diverse activities including marketing strategies for higher education institutions and scheduling of class and transportation for elementary and secondary schools. Attorneys and legal professionals look at the impact of programs and activities on jury selection, perceptions of courtroom behavior, and trust/support for new and existing statutes. Business leaders are c onstantly monitoring the public's attitudes and behaviors in regards to product development, customer satisfaction, marketing strategies, and even location of facilities. Not-for-profit agencies estimate the potential for enlisting volunteers, the potential for fundraising, and effectiveness of fundraising campaigns. Of course, beyond such applied uses, academicians in many disciplines use survey data to study a broad range of phenomena including financial risk-taking, voting behavior, family satisfaction, medical treatment preferences, and a host of other areas.

Although many people use survey data, few are trained in the twin goals of the certificate program—evaluation of the quality of survey data and the implementation of programs of survey research from data collection through analysis. The main objective of this program is to provide a graduate student with such training through an interdisciplinary approach to all aspects of survey research.

Students considering application to the certificate program are welcome in the classes (with prerequisites or instructor's permission). Up to 9 credit hours earned as a graduate nondegree student or graduate degree student and approved by the program's director may be applied toward the certificate upon admission to the program.

Course Requirements

The Survey Research Certificate Program consists of a total of 15 credit hours of course work at the 500-600 level. No more than 3 credit hours may be transferred from another institution and no undergraduate-level courses may be used toward the certificate. The certificate program consists of a graduate core curriculum of two courses and three courses that may come from a student's regular graduate program and approved by the certificate's three-person program committee, consisting of the director of the certificate program, a political science faculty member, and one other faculty member from the designated program faculty.

Required Core Courses (6 credits)

- POLS Y567 Survey Research: Approaches and Issues (3 cr.) An introductory seminar that will discuss all the key approaches, issues, and concepts in survey research, allowing students to identify more specific issues that may be examined in their elective courses. One element of the course will be hands-on introduction to the facilities and methods of the IU Public Opinion Laboratory.
- POLS Y590 Seminar in Survey Research (3 cr.) A capstone seminar designed to be taken as last course in certificate program and to examine current issues in the application of survey research to public policy. Students will share with students from a variety of disciplines their particular applications to

increase interdisciplinary awareness of problems and prospects of survey research.

Electives (9 cr.)

Students will be required to complete 9 additional credit hours of course work chosen from a group of primary courses or alternates. This list of alternates is subject to approval by the program committee and substitutions may be approved by that committee. The list is designed to maximize the flexibility of an interdisciplinary field such as survey research. Courses are offered with varying regularity, but the curriculum is designed to allow each discipline to adapt its courses to fit students' needs in its area.

- POLS Y575 Political Data Analysis I (3 cr.) Introduces students to quantitative research methods for studying politics, focusing on topics that are statistical in content or that must be addressed for statistics to make sense. Students who complete the course will achieve a level of statistical competency that will enable them to enroll in courses concerned with multivariate statistical techniques, and will acquire the basic skills of data analysis.

Alternates

- Public Affairs V506 Statistical Analysis for Effective Decision Making (3 cr.)
- Public Health S528 Mathematical Statistics (3 cr.)
- SOC R551 Sociological Research Methods (3 cr.)
- Or any other graduate course that includes inferential statistics through regression analysis and is accepted by the program committee.
- POLS Y576 Political Data Analysis II (3 cr.) Builds upon Y575 by familiarizing students with more advanced research methods, such as multiple regression analysis and techniques for dealing with categorical and limited dependent variables. Models to be covered include logit, probit, multinomial logit, ordered probit, duration models, and survival analysis. Attention will be directed at the application of these methods to political phenomena, policy applications, and the presentation of results.

Alternates

- Public Health P600 Epidemiological Research Methods (3 cr.)
- SOC R559 Intermediate Sociological Statistics(3 cr.)
- Or any other graduate course that includes inferential statistics through regression analysis and is accepted by the program committee.
- POLS Y580 Research Methods (3 cr.) This course surveys the major techniques for investigating current political and policy problems. It emphasizes the relationship between theory and practice in understanding and conducting research. It will examine issues in field research essential to a full understanding of a research problem.

Alternates

- Health Administration H518 Statistical Methods for Health Services (3 cr.)
- Public Health P601 Advanced Epidemiology (3 cr.)
- SOC R551 Sociological Research Methods (3 cr.)
- SOC R663 Public Opinion: Research and Methods (3 cr.)
- Or any other graduate course that includes inferential statistics through regression analysis and is accepted by the program committee.
- Internship Option (3 cr.)

As an alternative to one of the electives, students may—with the approval of the program committee—substitute an internship experience for one of the elective courses. They will be required to work with an approved faculty member in completing a survey research project arising out of placement with an approved research organization(excluding the IUPUI Survey Research Center) involving a commitment of at least eight hours per week for one full semester. They would enroll for credit in Y585 Internship in Survey Research or a comparable internship course subject to approval by the program committee.

Faculty

Director
Professor Brian Vargus* (Political Science)

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Linda Haas* (Sociology), Brian Vargus* (Political Science), Eric Wright* (Public and Environmental Affairs)

Associate Professors

Margaret Ferguson (Political Science)

Assistant Professor

Aaron Dusso, (Political Science)

Academic Advisor

Professor Brian Vargus*, Cavanaugh Hall 504C, (317) 274-7226

Courses

POLS–Y 567 Survey Research: Approaches and Issues (3 cr.) An introductory seminar that will discuss all the key approaches, issues, and concepts in survey research, allowing students to identify more specific issues that may be examined in their elective courses. One element of the course will be hands-on introduction to the facilities and methods of the IU Public Opinion Laboratory.

POLS–Y 590 Seminar in Survey Research (3 cr.) A capstone seminar designed to be taken as last course in certificate program and to examine current issues in the application of survey research to public policy. Students will share with students from a variety of disciplines their particular applications to increase interdisciplinary awareness of problems and prospects of survey research.

POLS–Y 575 Political Data Analysis I (3 cr.) Introduces students to quantitative research methods for studying politics, focusing on topics that are statistical in content or that must be addressed for statistics to make sense. Students who complete the course will achieve a level of statistical competency that will enable them to enroll in

courses concerned with multivariate statistical techniques, and will acquire the basic skills of data analysis. Alternates Public Affairs V506 Statistical Analysis for Effective Decision Making (3 cr.) Public Health S528 Mathematical Statistics (3 cr.) Sociology R551 Sociological Research Methods (3 cr.) Or any other graduate course that includes inferential statistics through regression analysis and is accepted by the program committee.

POLS–Y 576 Political Data Analysis II (3 cr.) Builds upon Y575 by familiarizing students with more advanced research methods, such as multiple regression analysis and techniques for dealing with categorical and limited dependent variables. Models to be covered include logit, probit, multinomial logit, ordered probit, duration models, and survival analysis. Attention will be directed at the application of these methods to political phenomena, policy applications, and the presentation of results. Alternates Public Health P600 Epidemiological Research Methods (3 cr.) Sociology R559 Intermediate Sociological Statistics(3 cr.) Or any other graduate course that includes inferential statistics through regression analysis and is accepted by the program committee.

POLS–Y 580 Research Methods (3 cr.) This course surveys the major techniques for investigating current political and policy problems. It emphasizes the relationship between theory and practice in understanding and conducting research. It will examine issues in field research essential to a full understanding of a research problem. Alternates Health Administration H518 Statistical Methods for Health Services (3 cr.) Public Health P601 Advanced Epidemiology (3 cr.) Sociology R551 Sociological Research Methods (3 cr.) Sociology R663 Public Opinion: Research and Methods (3 cr.) Or any other graduate course that includes inferential statistics through regression analysis and is accepted by the program committee.

Sociology

School of Lineral Arts

Departmental E-mail: sociolog@iupui.edu

Departmental URL: http://liberalarts.iupui.edu/sociology/

Curriculum

Curriculum Courses Faculty

Master of Arts Degree

Admission Requirements

Five undergraduate sociology courses (or approved equivalents, with no more than two of the latter) with a total grade point average of at least 3.0 (on a scale of 4.0); two samples of writing (a 750-word essay [required by the Indiana University Graduate School], and a sole-authored report or term paper [required by the sociology department]); official transcripts; and three letters of reference. Foreign applicants are required to take the TOEFL. The GRE general test is not required, but is recommended for admission.

Students not meeting the above requirements may be admitted on probation, or they may be required to enroll in courses as a graduate non-degree student to complete the prerequisites.

Course Requirements

A total of 36 credit hours, distributed as follows: 12 credits of basic sociology courses (sociological theory [R556 or R557], quantitative methods [R551], qualitative methods [S659], and sociological statistics [R559]); 12 sociology credits in one area of concentration (medical sociology; family and gender studies; work and organizations); 6-9 credits of electives (any graduate courses approved by the University Graduate School); 3-6 in thesis or internship credits. (An undergraduate statistics course [R359 or the equivalent] is a prerequisite for R559.)

Thesis or Internship

A thesis or internship is required.

Grades

Students must maintain a grade-point average of at least 3.0 (B) in all coursework.

Ph.D. Minor

Students who are candidates for the Ph.D. degree in other departments may obtain a minor in sociology at IUPUI. The intent of the minor is to develop multidisciplinary skills, exposing students to theories and methods outside their major department. The Ph.D. minor in sociology has an unstructured curriculum that can provide students with a foundation in basic areas in sociology and the opportunity to study advanced sociological theory, qualitative and quantitative research methods, and statistics.

Course Requirements

- Four sociology courses at the 500 level or above, totaling 12 credits.
- An average grade of B (3.0 on a 4.0 scale) or above in these courses.
- No more than one individual readings course.
- At least half of these courses must be taken at the IUPUI campus.

Faculty

Curriculum Courses Faculty

Chairperson

Professor Neale Chumbler*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

David C. Bell, Neale Chumbler, Carol B. Gardner*, Linda L. Haas*, Lynn Pike, Robert W. White*, Colin J. Williams*, Patricia A. Whittberg*, Ain Haas

Associate Professors

Robert Aponte*, Wan-Ning Bao, William P. Gronfein, Najja Modibo, Peter Seybold, Carrie E. Foote*

Assistant Professors

Tamara Leech, Marci Littlefield

Adjunct Senior Scientist

Betsy Fife (Nursing)

Adjunct Professor

Eric R. Wright* (Public and Environmental Affairs)

Adjunct Associate Professors

Gail Whitchurch* (Communication Studies),

Adjunct Assistant Professors

Devon Hensel (Adolescent Medicine)

Courses

Curriculum Courses Faculty

SOC–R 515 Sociology of Health and Illness (3 cr.) Surveys important areas of medical sociology, focusing on social factors influencing the distribution of disease, help-seeking, and health care. Topics covered include social epidemiology, the health-care professions, socialization of providers, and issues of cost and cost containment.

SOC–R 517 Sociology of Work (3 cr.) Must be at graduate standing. Course explores how work is being restructured in the “new economy.” Topics include the changing meaning of work, the quest for dignity in the workplace, the plight of the working poor, and prospects for the labor movement (among other items).

SOC–R 525 Gender and Work (3 cr.) P: Graduate standing and 6 credit hours of sociology, or consent of the instructor. This course critically analyzes contemporary theory and research on gender and work. It examines how women’s and men’s roles in paid and unpaid work are socially constructed, through socialization, social interaction, and the actions of social institutions. The interaction of gender, race, ethnicity, and social class will be explored.

SOC–R 530 Families and Social Policy (3 cr.) P: R100, R220, graduate standing. This seminar will explore how the government and labor market affect family structure and the quality of family life. Students will study the implications of family research for social policy and learn to develop theoretical frameworks for evaluating social policies affecting families.

SOC–R 537 Gender and Society (3 cr.) Examines some of the approaches to gender, emphasizing social interationist and feminist theory/methods. In addition, we will relate these approaches to the study of contemporary gender approaches in selected social spheres, which may vary according to instructor’s specialization.

SOC–R 551 Quantitative Methods in Sociology (3 cr.) Surveys the major quantitative techniques for investigating current sociological problems. It emphasizes the relationship between theory and practice in understanding and conducting research.

SOC–R 556 Advanced Sociological Theory I (3 cr.) In-depth study of classical sociological theorists, particularly Marx, Durkheim, and Weber. Examines their roles in defining the discipline

SOC–R 557 Advanced Sociological Theory II (3 cr.) In-depth study of cotemporary sociological theories (e.g., social conflict, structural functionalist, symbolic interactionist) as a continuation of the issues raised by the classical sociological theorists as well as a response to the epistemological and social changes of the late twentieth century.

SOC–R 559 Intermediate Sociological Statistics (3 cr.) P: R359 or equivalent. Basic techniques for summarizing distributions, measuring interrelationships, controlling extraneous influences, and testing hypotheses are reviewed as students become familiar with the computer system. Complex analytical techniques commonly applied in professional literature are examined in detail, including analysis of variance, path diagrams, factor analysis, and log-linear models.

SOC–R 585 Social Aspects of Mental Health and Mental Illness (3 cr.) This is a graduate-level course that focuses on the sociology of mental illness and mental health. Provides a thorough grounding in the research issues and traditions that have characterized scholarly inquiry into mental illness in the past. Students will become familiar with public policy as it has had an impact on the treatment of mental illness and on the mentally ill themselves.

SOC–R 593 Applied Fieldwork for Sociologists (3 cr.) This course will provide students with both a theoretical and methodological background in the different types of qualitative analysis used in sociological fieldwork. Students will have the opportunity to study and to evaluate representative examples of qualitative studies and to complete by themselves a project done with qualitative methods.

SOC–R 594 Graduate Internship in Sociology (3–6 cr.) P: 18 hours of graduate credit in sociology. This course involves master’s degree students working in organizations where they apply or gain practical insight into sociological concepts, theories, knowledge, and methodology. Students analyze their experiences through work logs, a lengthy written report, and regular meetings with a faculty committee. (Students on the thesis track may also take this course as an elective.)

SOC–R 610 Sociology of Health and Illness Behavior (3 cr.) This seminar explores sociological and social scientific research on health and illness behavior. Special emphasis is placed on examining how social factors and conditions shape people’s responses to disease, illness, and disability.

SOC–R 697 Individual Readings in Sociology (1–6 cr.) Investigation of a topic not covered in the regular curriculum that is of special interest to the student and that the student wishes to pursue in greater detail. Available only to sociology graduate students through arrangement with a faculty member.

SOC–S 500 Pro-Seminar in Sociology (1 cr.) P: Graduate standing and/or consent of the instructor. Introduction to current sociological research interests and concerns through the work of departmental members.

SOC–S 526 The Sociology of Human Sexuality (3 cr.) P: Graduate standing and consent of the instructor. This is a one-semester graduate-level course in the sociology of human sexuality. This course will provide (a) a detailed examination of the development of sex research, (b) a sociological perspective on and critique of this corpus, and

(c) an opportunity for students to develop research of their own.

SOC–S 530 Introduction to Social Psychology (3 cr.) P: Graduate standing or consent of the instructor. Examines the broad range of work in social psychology. Emphasis is placed on the relation between the classic and contemporary literature in the field.

SOC–S 560 Graduate Topics (3 cr.) Exploration of a topic in sociology not covered by the regular curriculum but of interest to faculty and students in a particular semester. Topics to be announced.Emphasis is placed on the relation between the classic and contemporary literature in the field.

SOC–S 569 M.A. Thesis (3–6 cr.) P: Permission of the graduate director. All students on the thesis track must register for 3 credit hours (up to 6 credit hours total) of the thesis credits as part of the requirements for the degree.

SOC–S 610 Urban Sociology (3 cr.) P: Graduate standing or consent of the instructor. Historical and contemporary causes, trends, and patterns of urbanization throughout the world. Various approaches to studying the process of urbanization, including ecological, social organizational, and political perspectives. Current developments and problems in urban planning.

SOC–S 612 Political Sociology (3 cr.) P: Graduate standing or consent of the instructor. An analysis of the nature and operation of power in a political system. Topics may include classical theories of power, political behavior and campaigns, the role of mass media in sustaining power, the state as a social institution, and political movements.

SOC–S 613 Complex Organizations (3 cr.) Theory and research in formal organizations: industry, school, church, hospital, government, military, and university. Problems of bureaucracy and decision-making in large-scale organizations. For students in the social sciences and professional schools interested in the comparative approach to problems of organization and their management.

SOC–S 616 Sociology of Family Systems (3 cr.) P: Graduate standing or consent of the instructor. Focus on the nature, structure, functions, and changes of family systems in modern and emerging societies, in comparative and historical perspective. Attention is given to relationships with other societal subsystems, and to interaction between role occupants within and between subsystems.

SOC–S 632 Socialization (3 cr.) The processes of development of the individual as a social being and societal member, focusing on childhood or socialization into adult roles.

SOC–S 659 Qualitative Methods in Sociology (3 cr.) Methods of obtaining, evaluating, and analyzing qualitative data in social research. Methods covered include field research procedures, participant observation, interviewing, and audiovideo recording of social behavior in natural settings.

Spanish

School of Liberal Arts

Departmental E-mail: wlac@iupui.edu

Departmental URL: http://liberalarts.iupui.edu/wlac/AcadMAT.htm

Curriculum

Curriculum Courses Faculty

Degree Offered

Master of Arts in Teaching Spanish

Program Information

This international course of study has been designed specifically for teachers of Spanish. It provides graduate-level course work in the Spanish language, Hispanic cultures, teaching methodology, applied linguistics, and Hispanic art and literature. It provides for the professional development of Spanish teachers through the improvement of their language and teaching skills, and it will enable their career advancement. Graduates of the program will in turn contribute to better teaching of Spanish in Indiana schools, improving the language skills and the cultural awareness of Indiana students.

Who might be interested in this kind of degree program?

- Current K-12 Spanish teachers;
- Students graduating with a degree in Spanish (or a related field) who are seeking to obtain a master's degree;
- Current or future community college and adjunct university faculty in Spanish.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

1. A bachelor's degree from an accredited college or university, with a minimum grade point average of 3.0 (on a 4.0 scale) in the student's undergraduate major, documented by an official transcript. Applicants are expected to have a B.A. in Spanish, but admission is also considered for those who otherwise demonstrate the competency necessary for successful graduate work in Spanish. Students lacking advanced course work in Spanish are required to take a 400-level course in each of these three areas: Hispanic linguistics, literature, and culture. Students must complete these courses with a grade of B or better before beginning the graduate curriculum, either at IUPUI or at the University of Salamanca. Formal petitions will be necessary for any exception to this requirement.
2. Proficiency in the Spanish language. There are two options: (a) Exam—Students may take the Basic Diploma in Spanish (DELE) issued by the Spanish Ministry of Education, Culture, and Sport. The official exam determining this proficiency is offered once a year at IUPUI. Only scores obtained within three years of the date of application will be accepted. Or (b) A tape—including applicant's oral sample of 10-15 minutes of spontaneous speech.
3. A sample of academic writing in Spanish on some aspect of Hispanic culture, literature, linguistics, or

pedagogy. The essay may be in the form of a paper written for a course.
4. Three letters of recommendation. At least two of these should be from professors.
5. For international students, the university requires a minimum TOEFL score of 550 on the paper version and 213 on the computer-based test. Send scores to Institution Code 1325, Dept. Code 2608. Students who do not achieve this score may be admitted to the university conditionally and may be required to take English as a Second Language courses through the Department of English. While taking these courses they will be allowed to register for a maximum of six credit hours in the M.A.T. in Spanish. If admitted, international students will also be required to take IUPUI's ESL placement test before registering for the first semester. For further admissions instructions and requirements for international students, prospective students should refer to the Office of International Affairs Web page at www.iupui.edu/~oia/.

Please note: We do not require the GRE for admission to the M.A.T. in Spanish program, but it is required for consideration for a university fellowship.

Online application: Please access the online portion of the application from this link: http://www.iupui.edu/~gradoff/admissions/. This application requires basic information such as your name, address, program of study, residency status, etc. Please pay careful attention to the personal statement, in which you explain your reasons for pursuing the Spanish graduate program. The statement should be written in English. **Please note:** under "educational objectives" you must choose "master's" as your type of admission, "Spanish (IU Graduate School)" as your academic program, and "Spanish M.A.T." as your major.

Supporting documentation, as outlined above, should be directed to the Spanish M.A.T. Program, Cavanaugh Hall Room 545, IUPUI, 425 University Boulevard, Indianapolis, IN 46202-5140.

Please note the deadlines below:

- For admission in either fall or spring semesters with university fellowship consideration (GRE required), applications must be received by January 15.
- For admission in the fall semester, all other applications, including requests for departmental aid consideration (teaching or research assistantships), must be received by April 1.
- For admission in the spring semester with no financial aid consideration, applications must be received by October 15 of the preceding year.

Course Requirements

The M.A.T. in Spanish consists of 36 credits and it may be completed in three or four academic semesters and two five-week courses abroad completed in sequential years. The summer work abroad must be done in consecutive years. For example, in 2012-2013 or 2013-2014. The remainder of the course work must be completed in residence at IUPUI.

OPTION 1: M.A.T. with THESIS

Course work at IUPUI (to be completed during the academic year): 9 credit hours of core coursework, 9 credit hours of additional coursework, and 6 credit hours of thesis work.

Core Required Courses (9 cr.)

- S515 Acquisition of Spanish as a Second Language (3 cr.)
- S517 Methods of Teaching College Spanish (3 cr.)
- S519 Practicum in the Teaching of Spanish (3 cr.)

THESIS (6 cr.)

- S686 M.A.T. Thesis (2-6 cr.)

Additional Coursework Options (9 cr.)

- S511 Spanish Syntactic Analysis (3 cr.)
- S513 Introduction to Hispanic Sociolinguistics (3 cr.)
- S518 Studies in Latino and Spanish American Culture (3 cr.)
- S528 Translation Practice and Evaluation (3 cr.)
- S680 Topics in Contemporary Spanish American Literature (3 cr.)

Course Work Abroad (12 cr.)
(to be completed in two consecutive July sessions):

- S521 Spanish Grammar and Linguistics for Teachers I (3 cr.)
- S523 Spanish Literature, Art, and Culture for Teachers I (3 cr.)
- S524 Spanish Grammar and Linguistics for Teachers II (3 cr.)
- S525 Spanish Literature, Art, and Culture for Teachers II (3 cr.)

OPTION 2: M.A.T. via Coursework

Course work at IUPUI (to be completed during the academic year): 9 credit hours of core coursework, and 15 credit hours of additional coursework
Core Required Courses (9 cr.)
S515 Acquisition of Spanish as a Second Language (3 cr.)
S517 Methods of Teaching College Spanish (3 cr.)
S519 Practicum in the Teaching of Spanish (3 cr.)

Additional Coursework Options (15 cr.)

- S511 Spanish Syntactic Analysis (3 cr.)
- S513 Introduction to Hispanic Sociolinguistics (3 cr.)
- S518 Studies in Latino and Spanish American Culture (3 cr.)
- S528 Translation Practice and Evaluation (3 cr.)
- S680 Topics in Contemporary Spanish American Literature (3 cr.)

Course Work Abroad (12 cr.)
(to be completed in two consecutive July sessions):

- S521 Spanish Grammar and Linguistics for Teachers I (3 cr.)
- S523 Spanish Literature, Art, and Culture for Teachers I (3 cr.)
- S524 Spanish Grammar and Linguistics for Teachers II (3 cr.)

- S525 Spanish Literature, Art, and Culture for Teachers II (3 cr.)
- S686 M.A.T. Thesis

Faculty

Chairperson

Professor Gabrielle Bersier*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professor

Enrica Ardemagni

Associate Professors

Marta Antón, Herbert Brant, Rosa Tezanos-Pinto

Assistant Professors

Kimmaree Murday, Ben Van Wyke

Director of Graduate Studies

Associate Professor Rosa Tezanos-Pinto, Cavanaugh Hall 501 F, (317) 278-0012

Courses

SPAN–S 507 Foreign Language Institute (3 cr.) Intensive interdepartmental course involving language laboratory and audiovisual equipment and techniques, lecture, assignments in contemporary civilization (in the foreign language), and discussion of classroom use of applied linguistics. Taught only in summer. Intended primarily for teachers.

SPAN–S 511 Spanish Syntactic Analysis (3 cr.) P: Graduate standing or consent of instructor. Introduction to the analysis of syntactic data. Focus on developing theoretical apparatus required to account for a range of syntactic phenomena in Spanish.

SPAN–S 513 Introduction to Hispanic Sociolinguistics (3 cr.) P: S320, S426 or consent of instructor. This course examines the relationship between language and society in the Spanish-speaking world. It surveys a wide range of topics relevant to Spanish: language as communication, the sociology of language, and linguistic variation. The course is conducted entirely in Spanish.

SPAN–S 515 The Acquisition of Spanish as a Second Language (3 cr.) P: S426,S428, or consent of instructor. This course is designed primarily to provide graduate students of Spanish with an introduction to the study of the acquisition of Spanish as a second language. We will survey a selection of studies exploring topics that range from the development of second language (Spanish) grammars, to second language production, second language comprehension, input processing, and the acquisition of pragmatic and sociolinguistic competence. Students are expected to work on a research project. The course is conducted entirely in Spanish.

SPAN–S 517 Methods of Teaching College Spanish (3 cr.) P: S428 or consent of instructor. This course on communicative language teaching takes as its point of departure the body of research on second language development. We extrapolate from this base principles and parameters to guide classroom instruction. We cover a full range of topics from grammar and input to spoken and written language. Students are expected to work on a research project and derive pedagogical implications for teaching Spanish. The course is conducted entirely in Spanish.

SPAN–S 518 Studies in Latino and Spanish American Culture (3 cr.) P: S412 or consent of instructor. This graduate-level course introduces essential themes and topics in the study of the cultural phenomena produced in Latin America and among Hispanics in the United States. The object of inquiry will include the knowledge, belief systems, artistic production, laws, customs, and other socially determined behaviors that pertain to the Spanish-speaking peoples in the Western hemisphere. Topics such as the relationship between the colonizer and the colonized, the structure of institutions that express or govern social relationships, manifestations of popular culture, the various forms by which communication is affected, high and low art, religious syncretism, and native indigenous cultures will be explored. Students will make an oral presentation on a theoretical text and write a research paper.

SPAN–S 519 Practicum in the Teaching of Spanish (3 cr.) P: S517 or instructor's consent. Practical application of the teaching methodology explored in S517 Methods of Teaching College Spanish. Students will undertake teaching projects supervised by a graduate faculty member in Spanish and meet with their mentors to assess their teaching objectives, techniques, materials, and outcomes.

SPAN–S 521 Spanish Grammar and Linguistics for Teachers I (3 cr.) This course presents themes and issues in Spanish grammar and in Hispanic linguistics selected for their relevance to teaching Spanish to nonnative students. Pedagogical implications and teaching strategies will be discussed. Content is distinct from that of S524.

SPAN–S 523 Spanish Literature, Art, and Culture for Teachers I (3 cr.) This course presents authors, artists, themes, and issues in Spanish literature, visual art, and cultural life selected to enrich the teaching of Spanish to nonnative students. Pedagogical implications and teaching strategies will be discussed. Content is distinct from that of S525.

SPAN–S 524 Spanish Grammar and Linguistics for Teachers II (3 cr.) This course presents themes and issues in Spanish grammar and in Hispanic linguistics selected for their relevance to teaching Spanish to nonnative students. Pedagogical implications and teaching strategies will be discussed. Content is distinct from that of S521.

SPAN–S 525 Spanish Literature, Art, and Culture for Teachers II (3 cr.) This course presents authors, artists, themes, and issues in Spanish literature, visual art, and cultural life selected to enrich the teaching of Spanish to nonnative students. Pedagogical implications and teaching strategies will be discussed. Content is distinct from that of S523.

SPAN–S 528 Translation Practice and Evaluation (3 cr.) A graduate credit course in the problems and

techniques of Spanish/English and English/Spanish translation. Includes the practical aspects of translation from various texts (literary, technical, scientific, commercial, social) and evaluation of professional translations. Translation theory will also be studied.

SPAN–S 680 Topics in Contemporary Spanish American Literature (3 cr.) Topics include poetry, drama, short story, novel, essay.

SPAN–S 686 M.A.T. Thesis (2–6 cr.) P: Authorization of Graduate Director. Students will identify a research theme and develop it under the guidance of a director. The topic will be related to the teaching of the Spanish language or to the teaching of an aspect of Hispanic culture.

Women's Studies

School of Liberal Arts

Departmental E-mail: wostudy@iupui.edu

Departmental URL: http://liberalarts.iupui.edu/wost/

Curriculum

Women's Studies Program

Women's studies brings together faculty, women, and some men interested in women's issues in teachings, research, and service. Interdisciplinary in nature, WOST explores a wide range of issues as seen through the perspective of gender. Women's studies can help shape a vision of women's position in society that will enable students to make a more meaningful contribution wherever their career paths and future engagements may lead. A degree in women's studies should enhance a student's effectiveness in virtually any career.

For careers in law or social service, WOST gives insight into social practices that oppress women, such as rape, abuse, and job discrimination. For careers in biology, medicine, nursing, or other allied health professions, WOST offers an understanding of women's health needs. For business careers, WOST teaches students to understand the barriers and the opportunities for women seeking careers in the corporate world.

Requirements for the Graduate Minor

A total of 12 credit hours.

Faculty

Director
Nancy Robertson

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Gabrielle Bersier* (German), Paul Carlin* (Economics), Ulla Connor* (English), Carol Gardner* (Sociology), Linda Haas* (Sociology), Karen Kovacik (English), Missy Kubitschek* (English), Obioma Nnaemeka* (Women's Studies, French), Jane Schultz* (English), Robert Sutton (Foreign Languages), Susan Sutton* (Anthropology), Patricia Wittberg* (Sociology), Marianne Wokeck* (History)

Associate Professors

Dennis Bingham* (English), Peg Brand (Philosophy), Jeanette Dickerson-Putnam* (Anthropology), Catherine Dobris (Communication Studies), Karen Johnson (English), Ursula Niklas* (Philosophy), Susan Shepherd (English)

Graduate Advisor

Women's Studies, Cavanaugh Hall, Room 540A, Indianapolis, IN 46202-5140, (317) 274-7611.

Courses

WOST–W 500 Feminist Theory (3 cr.) An examination of contemporary feminist analyses of gender relations, how they are constituted and experienced, and how social structures maintaining sexist hierarchies intersect with hierarchies of race, class, and ethnicity.

WOST–W 601 Survey of Contemporary Research in Women's Studies: The Social and Behavioral Sciences (3 cr.) An exploration of feminist perspectives in the social sciences. Theoretical frameworks and research styles are examined, as are feminist critiques of traditional social scientific frameworks and research methods.

WOST–W 602 Contemporary Research in Women's Studies: The Humanities (3 cr.) Review of literature on sex roles, psychology of women, socialization, and politicization of women. Training in methodology of research on women; critique of prevailing and feminist theoretical frameworks for studying women.

WOST–W 695 Graduate Readings and Research in Women's Studies (3–6 cr.) An opportunity for graduate students in various programs at IUPUI to explore specific issues within the field of women's studies, guided by faculty with particular expertise in these areas.

WOST–W 701 Graduate Topics in Women's Studies (3–4 cr.) Advanced investigation of selected research topics in women's studies. Topics to be announced.

Health Sciences

School of Health and Rehabilitation Sciences

Departmental E-mail: jmackinn@iupui.edu

Departmental URL: www.shrs.iupui.edu/

Curriculum

Degrees Offered

Master of Science in Health Sciences, Master of Science in Therapeutic Outcomes Research, Doctor of Philosophy in Health and Rehabilitation Sciences, Graduate Certificate in Health Sciences Patient Centered Outcomes.

Master of Science in Health Sciences

Program Information

The Master of Science in Health Sciences is an interdisciplinary graduate degree designed for health and rehabilitation professionals and educators interested in pursuing advanced education at the master's level. Graduates of the program will acquire advanced knowledge and understanding of current trends and issues, and the problem-solving skills to prepare them

to assume leadership roles in practice and educational settings.
The program is designed to meet the educational needs of practicing health and rehabilitation professionals and educators. Courses are offered in a combination of compressed/intensive classroom, online, and distance formats. Most of the courses taken to satisfy the requirements of the master's degree can be used to fulfill course requirements for the PhD in Health and Rehabilitation Sciences.

Program Requirements

The program consists of a minimum of 36 credit hours of course work, including a required 6 credit hour project or thesis. The program curriculum consists of three components: (1) health sciences core courses to include preparation for project/thesis (21 credit hours); elective courses (9); and project/thesis (6).

Admission Requirements

Students accepted into the program must complete university, school, and program admission requirements. The minimum admission requirements are as follows:

1. A baccalaureate degree from an accredited institution (applicant must submit an official copy of all undergraduate transcripts).
2. Cumulative undergraduate grade point average of 3.0 on a 4.0 scale.
3. At least one undergraduate statistics or research methods course completed with a grade of B or better.
4. Three letters of recommendation from those familiar with the applicant's academic and professional performance.
5. 300 to 500 word personal statement of academic and professional goals.
6. If applicable, a TOEFL score of at least 600.

No student will be permitted to work toward a degree without first being admitted to the Master of Science program.

Prior Course Work Applied Toward Degree Requirements

A maximum of 6 graduate credit hours earned at Indiana University before admission may be applied toward a degree. Upon the recommendation of the Health Sciences program director and with the approval of the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee, up to 8 credit hours of graduate work at other institutions may be transferred in partial fulfillment of degree requirements. No course may be transferred from another institution unless the course was completed with a grade of B or higher within five years before matriculation in the Master of Science degree program.

Application Materials

An applicant must submit completed application forms to the Office of Academic and Student affairs, School of Health and Rehabilitation Sciences. Transcripts from all universities attended must be included. However, if the applicant is a graduate of Indiana University, the school will obtain those transcripts directly. Non–Indiana University graduates must submit at least one official transcript from each university attended. A nonrefundable application fee is required from all applicants who have never attended Indiana University.

Curriculum

A total of 36 credit hours will be required to complete the degree, allocated as follows:

Core/Required Courses (21 credit hours):

- SHRS W510 Trends and Issues in Health Sciences (C Mushi-Brunt) (3 cr.)
- SHRS W520 Evidence Based Critical Inquiry in the Health Sciences (J Mac Kinnon) (3 cr.)
- SHRS W661 Theories of Health Promotion/Disease Prevention (C Mushi-Brunt) (3 cr.)
- SHRS W667 Ethical issues in Rehabilitation Services (A Agho) or equivalent (3 cr.)
- SHRS W 550 Health and Rehabilitation Systems Across the World (A Agho) (3 cr.)
- SHRS W 625 Diversity Issues in Health and Rehabilitation Services (J Buckner-Brown) (3 cr.)
- NURS R505 Research Methods (or equivalent) (3 cr.)

Electives (9 credit hours) to be determined in consultation with the program director.
Examples:

- SHRS W540 Patient Centered Outcomes Research (J Mac Kinnon) (3 cr.)
- SHRS W660 Rehabilitation Theories and Application (J Crabtree) (3 cr.)
- SHRS W662 Rehab Services in Health Care Systems and Delivery (M Weaver) (3 cr.)
- SHRS W650 Global Perspectives in Nutrition, Health, Disease, and Disability (J Ernst) (3 cr.)
- SHRS W640 Medical Aspects of Disabilities (A Gupta) (3 cr.)
- SHRS W562 Psychological Aspects of Disabilities (E Voci) (3 cr.)
- SHRS W594 Administration of Health Sciences Education (A Agho) (3 cr.)

Project or thesis (6 credit hours)

- SHRS W599 Thesis(6 cr.) (arranged) OR
- SHRS W600 Project in Health Sciences (6 cr.)

Courses in Health Sciences

- SHRS W510 Trends and Issues in the Health Sciences (3 cr.)
- SHRS W520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.)
- SHRS W661 Theories of Health Promotion/Disease Prevention (3 cr.)
- SHRS W667 Ethical Issues in Rehabilitation Services (3 cr.)
- SHRS W550 Health and Rehabilitation Systems Across the World (3 cr.)
- SHRS W551 Health and Rehabilitation Professionals in Developing Countries (3 cr.)
- SHRS W552 Seminar in Global Rehabilitation and Health (3 cr.)
- HRS W560 Survey of Adaptive Rehabilitation Technology (3 cr.)

- SHRS W561 Approaches to Rehabilitation Case Management (3 cr.)
- SHRS W562 Psychological Aspects of Disability (3 cr.)
- SHRS W625 Diversity Issues in Health and Rehabilitation Services (3 cr.)
- SHRS W640 Medical Aspects of Disabilities (3 cr.)
- SHRS W641 Proposal Writing for Community-Based Rehabilitation Programs (3 cr.)
- SHRS W642 Practicum in Rehabilitation and Disability (3 cr.)
- SHRS W650 Global Perspectives in Nutrition, Health, Disease, and Disability (3 cr.)
- SHRS W651 International Service-Learning in Rehabilitation (3 cr.)

Master of Science in Therapeutic Outcomes Research

Note: This program is not accepting new students for 2010-2011.

This graduate program is offered through the University Graduate School. This program is designed to prepare credentialed health care professionals to conduct patient outcomes research in order to evaluate the effectiveness of therapeutic interventions within their own disciplines. The chief feature of this program is the emphasis on original research to determine therapeutic benefit in terms of physiologic, symptomatic, functional, perceptional, and quality-of-life outcomes.

There have been three major eras in the evolution of the U.S. health care system since the late 1940s: expansion, cost-containment, and now assessment and accountability. In the expansion era, health care underwent remarkable growth in technology, training, and delivery. Emphasis was on the perfection of health care, with no consideration of costs or resource demands. Spiraling costs and disenchantment with the curative power of technology brought on the cost-containment era. Emphasis was then placed on limiting spending and maximizing productivity, often at the expense of patient satisfaction. Today, there is a growing understanding of the balance between use of healthcare resources on one hand and patient benefits on the other, or between assessment and accountability.

Based on a more sophisticated awareness of what actually constitutes the costs and benefits of treatment, emphasis is now placed on rational use of resources in light of a realistic appraisal of therapeutic benefits. Patient-centered outcomes research concentrates on the assessment of therapeutic interventions under conditions of real, not ideal, practice. Allied health professionals are particularly well positioned to conduct therapeutic outcomes research because their clinical work is oriented toward the holistic factors that outcomes research purports to measure: multidimensional assessment of health status and improvement of patient quality of life. Moreover, as demand for useful and valuable outcomes measurement continues to grow among healthcare institutions and organizations, allied health professionals are increasingly being called upon to conduct outcomes assessment at their place of employment.

Admission Requirements

Students accepted into the program must meet complete university, school, and program admission requirements. The minimum admission requirements are as follows.

1. An appropriate level of achievement on the general Graduate Record Examination (GRE). Test scores of at least 500 on verbal and analytical sections OR for those students enrolled in the Certificate in Health Sciences Patient Centered Outcomes (see certificate description below), completion of all four courses in the certificate with a grade of B (3.0) or better in each course.
2. Two letters of recommendation from those familiar with the applicant's academic and professional performance.
3. Eligibility for license or credential in a health care profession.

Exceptions to those requirements may be granted by the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee upon written petition from the applicant and with written recommendation from the Therapeutic Outcomes Research program director. The petition must include a full statement of conditions justifying the exception. Conditional admission will be for a stated time period and will entail specific conditions to be met to receive regular admission status.

No student will be permitted to work toward a degree without first being admitted to the Master of Science Program.

Prior Course Work Applied Toward Degree Requirements

A maximum of 6 graduate credit hours earned at Indiana University before admission may be applied toward a degree. Upon the recommendation of the Therapeutic Outcomes Research program director and with the approval of the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee, up to 8 credit hours of graduate work at other institutions may be transferred in partial fulfillment of degree requirements. No course may be transferred from another institution unless the course was completed with a grade of B or higher within five years before matriculation in the Master of Science degree program.

Application Materials

An applicant must submit completed application forms to the Office of Academic and Student Affairs, School of Health and Rehabilitation Sciences. Transcripts from all universities attended must be included. Indiana University graduates should request that the registrar's office send unofficial copies of their transcripts. Non–Indiana University graduates must submit at least one official transcript from each university attended.

Course Requirements

A total of 30 credit hours beyond the bachelor's degree, of which 12 credit hours are in health outcomes, 3 credit hours are in electives, and 15 credit hours are in research (including thesis work).

Thesis Requirement

The capstone experience is the writing and submission of a thesis based on original research conducted by the student and supervised by a thesis committee. Curricular electives are focused on developing expertise to articulate and research a testable hypothesis in a specific content area pertaining to patient-centered outcomes under the direction of a research advisor holding graduate faculty membership in University Graduate School. Theses must follow the Indiana University Guide to the Preparation of Theses and Dissertations

Curriculum

Health Outcomes (12 cr.)

- SHRS W510 Trends and Issues in the Health Sciences (3 cr.)
- SHRS W540 Patient-Centered Outcomes Research (3 cr.)
- INFO I535 Clinical Information Systems (3 cr.)
- SPEA H517 Managerial Epidemiology (3 cr.)

Electives (3 cr.)

(In consultation with graduate advisor) (3 cr.)

Research (15 cr.)

- SHRS W520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.)
- SHRS W570 Research Communication in the Health Sciences (2-3 cr.)
- SHRS W599 Thesis in Health Sciences (6 cr.)
- GRAD G651 Introduction to Biostatistics I (3 cr.)

Courses Offered in Other IUPUI Schools:

- GRAD G651 Introduction to Biostatistics I (3 cr.)
- INFO I535 Clinical Information Systems (3 cr.)
- SPEA H517 Managerial Epidemiology (3 cr.)

Total minimum credits: 30 cr.

Courses in Therapeutic Outcomes Research

Courses offered in the School of Health and Rehabilitation Sciences

"P" refers to a course prerequisite and "C" to a course that must be taken concurrently.

- SHRS W510 Trends and Issues in the Health Sciences (3 cr.)
- SHRS W520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.)
- SHRS W540 Patient-Centered Outcomes Research (3 cr.)
- SHRS W570 Research Communication in the Health Sciences (2-3 cr.)

Courses offered in other IUPUI Schools

- GRAD G651 Introduction to Biostatistics I (3 cr.)
- INFO I535 Clinical Information Systems (3 cr.)
- SPEA H517 Managerial Epidemiology (3 cr.)

Doctor of Philosophy in Health and Rehabilitation Sciences

Degree Objective

To develop scholars who, through their leadership and original research, will contribute to the knowledge base of health and rehabilitation sciences. Graduates will be able to be employed in universities, health care facilities and industries that focus on teaching others and advancing knowledge in health and rehabilitation.

Admissions Policy

Requirements, in addition to those of the Graduate School, include:

1. Completion of a post baccalaureate degree in health and rehabilitation sciences or in a related health care discipline, or completion of a baccalaureate degree with professional experience.
2. Resume or curriculum vitae.
3. A 300-500 word personal statement of learning objectives, research interest, and leadership potential.
4. Competitive scores (minimum of 500 recommended) on the verbal and quantitative sections and a score of 3.5 or better on the analytical writing section of the GRE, completed within 5 years before matriculation into the Ph.D. program. Successful completion of a post graduate degree will waive the matriculation time period.
5. Within one year from acceptance the student must identify a person willing to serve as the research mentor. The mentor must be actively engaged in research, and be able to effectively guide the student in the research process. The mentor must be formally approved by the School of Health and Rehabilitation Sciences' Academic Studies and Research Development (ASRD) Committee. The mentor does not have to be a faculty member in the SHRS, but must hold IU Graduate Faculty status or equivalent. This person may also serve as chair of the student's dissertation committee.

The ASRD Committee will be the body that will review applications and make acceptances. Priority will be given to students who indicate that they plan to attend full time, and to those who have secured sources of funding to support full time status.

A maximum of 30 semester credits may be transferred from the student's post baccalaureate course work, as approved by the ASRD Committee and the University Graduate School. No course may be transferred from another institution unless the course was completed with a grade of B or higher.

Any exceptions to the admissions policies must be requested in writing to the ASRD Committee. The request must be accompanied by a letter from the director of the Ph.D. program recommending either support or denial.

Curriculum Requirements

The minimum requirements for the Ph.D. are 90 credit hours of advanced study, of which 30 semester credits may be transferred from the student's post-baccalaureate degree study, as approved by the School Admissions Committee and the University Graduate School.

The credits for the Ph.D. are distributed in the following categories:

Health and Rehabilitation Sciences Core Curriculum (12 credits in required courses)

- W660 Rehabilitation Theories and Applications (3 cr.)
- W661 Theories of Health Promotion and Disease Prevention (3 cr.)
- W662 Rehabilitation Services in Healthcare Systems and Delivery (3 cr.)
- W672 Teaching Practicum within area of specialization (3 cr.)

Health and Rehabilitation Sciences Concentration (30 credits)

Students will select one of the three areas of concentration identified by the Institute of Medicine. Students must declare an area of concentration and identify appropriate coursework within the SHRS and across campus in consultation with their Advisory Committee. Areas of concentration include:

- Pathophysiology and Impairment
- Functional Limitations/Functional Participation
- Health Services

Research Core (42 credits)

- GRAD G505 The Responsible Code of Research (1 cr.)
- SHRS W674 Doctoral Seminar in Health and Rehabilitation Sciences (1 cr.)
- GRAD N802 Techniques of Effective Grant Writing (3 cr.)
- NURS W540 Writing for Publication (3 cr.)
- SHRS W670 Research Practicum in Health and Rehabilitation Sciences (6 cr.)
- Statistics and Research Design courses (9 cr.; courses must be approved by the student's Advisory Committee as part of the student's plan of study)
- Dissertation (19 cr.)

Electives (6 credits)

Minor

Because of the interdisciplinary nature of the Ph.D. curriculum, each student will complete 6-12 credits in an external area, and thus satisfy the minor requirement for the Ph.D.; specialized minors may be constructed on a case-by-case basis, if needed for a particular student's program.

Comprehensive Examination

Near, and usually in, the last semester of course work, students will be required to take a comprehensive written qualification examination in health and rehabilitation sciences, prepared by the student's Advisory Committee. Only student who pass the exam may continue in the program. Students may be able to retake the examination one time if they fail to pass the first time. The retake must occur within six months of the original examination

Courses in Health and Rehabilitation Sciences

Courses offered in the School of Health and Rehabilitation Sciences

- SHRS N576 Leadership Development in Pediatric Nutrition (3 cr.)
- SHRS W660 Rehabilitation Theories and Application (3 cr.)
- SHRS W661 Theories of Health Promotion and Disease Prevention (3 cr.)
- SHRS W662 Rehabilitation Services in Health Care Systems and Delivery (3 cr.)
- SHRS W670 Research Practicum in Health and Rehabilitation Sciences (3-6 cr.)
- SHRS W672 Teaching Practicum in Health and Rehabilitation Sciences (3 cr.)
- SHRS W674 Doctoral Seminar in Health and Rehabilitation Sciences (1 cr.)
- SHRS W680 Independent Study in Health and Rehabilitation Sciences (1-4 cr.)
- SHRS W690 Dissertation Proposal in Health & Rehabilitation Sciences (3-6 cr.)
- SHRS W692 Dissertation in Health & Rehabilitation Sciences (3-8 cr.)

Courses offered in other IUPUI Schools

- GRAD G505 The Responsible Conduct of Research (1 cr.)
- GRAD N802 Techniques of Effective Grant Writing (3 cr.)
- NURS W540 Writing for Publication (3 cr.)

Certificate in Health Sciences Patient Centered Outcomes

Note: This program is not accepting any new students for 2010-2011.

This four-course, 12 credit hour certificate is designed to provide credentialed health care professionals with information about the current trends and issues in health care to include the growing use of technology, use of evidence to inform practice decisions, and the use of outcome measures focused on the individual patient/client. The certificate will provide clinicians the opportunity to demonstrate career development in an area becoming increasingly important to clinicians both nationally and internationally. All courses are offered online.

The certificate is constructed so that all courses can be used as part of the advanced master's degree offered by the Department of Health Sciences: the Master of Science in Therapeutic Outcomes Research.

Students must complete all required course work (the four designated courses) with a grade of B (3.0) or better. Students will have three years to complete the certificate. The certificate director will be responsible for certifying completion of all requirements and will notify the University Graduate School once all requirements have been met. The director will ensure that certificate information is properly recorded with university offices.

Admission Requirements

Students accepted into the program must complete university, school, and program admission requirements. Specific school and program admission requirements include:

1. Two letters of recommendation from those familiar with the applicant's academic and professional performance.
2. Eligibility for license or credential in a health care profession.
3. 300-500 word personal statement of academic and professional goals.

Exceptions to those requirements may be granted by the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee upon written petition from the applicant and with written recommendation from the Therapeutic Outcomes Research program director. The petition must include a full statement of conditions justifying the exception. Conditional admission will be for a stated time period and will entail specific conditions to be met to receive regular admission status.

No student will be permitted to work towards the certificate without first being admitted to the certificate program.

Prior Course Work Applied Toward Degree Requirements

No credits will be accepted from other institutions to fulfill the requirements of the certificate. No undergraduate courses can be used to fulfill the requirements of the certificate.

Application Materials

An applicant must submit completed application forms to the Office of Academic and Student Affairs, School of Health and Rehabilitation Sciences. Transcripts from all universities attended must be included. Indiana University graduates should request that the registrar's office send unofficial copies of their transcripts. Non–Indiana University graduates must submit at least one official transcript from each university attended.

Curriculum

The certificate consists of four courses for a total of 12 credit hours. The courses are as follows.

- SHRS W510 Trends and Issues in Health Sciences (3 cr.)
- SHRS W520 Evidence Based Critical Inquiry in Health Sciences (3 cr.)
- SHRS W540 Patient Centered Outcomes Research (3 cr.)
- INFO I535 Clinical Information Systems

Faculty

Acting Chairperson

Professor Joyce MacKinnon, Ed.D., PT

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Austin Agho, M. Sue Brady (Emerita), Joyce Mac Kinnon, Jacquelynn O'Palka, Rebecca Porter, Karyl Rickard*, Lisa Riolo*

Associate Professors

Sara Blackburn, Jeffrey Crabtree, Judith Ernst, Thomas Fisher*, Patricia Scott

Assistant Professors

Peter Altenburger, Tracy Dierks*, Robyn Fuchs*, Michael Justiss, Chiung-Ju Liu, Christina Mushi-Brunt, Arlene Schmid, Stuart Warden*

Graduate Advisor

Joyce Mac Kinnon, 120 Coleman Hall, 1140 West Michigan Street, Indianapolis, IN 46202, (317) 274-1029

Courses

Courses in Health Sciences

SHRS–W 510 Trends and Issues in the Health Sciences (3 cr.) A seminar course to review pertinent literature and other sources of information as a basis for discussing trends and issues affecting the therapeutic professions and the health care delivery system.

SHRS–W 520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.) Fundamentals of research methodology, design, techniques, and procedures applicable to research problems in the allied health disciplines. Introduction to computer data analysis.

SHRS–W 667 Ethical Issues in Rehabilitation Services (3 cr.) Designed to explore contemporary ethical issues and concerns related to the delivery, organization, and management of rehabilitation services.

SHRS–W 550 Health and Rehabilitation Systems Across the World (3 cr.) Issues in global health and rehabilitation deliver systems from the viewpoint of many different disciplines with an emphasis on economically less developed countries.

SHRS–W 551 Health and Rehabilitation Professionals in Developing Countries (3 cr.) The primary purpose of this course is to help students understand the roles and expectations and the scope of training and educational preparation of health and rehabilitation professionals across the world with emphasis on economically less developed countries.

SHRS–W 552 Seminar in Global Rehabilitation and Health (3 cr.) This course is designed to cover current topics in international management and organization of health and rehabilitation services, governance, ethics, impact of donor organizations, and emerging global primary and public health care issues.

SHRS–W 560 Survey of Adaptive Rehabilitation Technology (3 cr.) Assisting students in the knowledge/ awareness of available high-tech/low-tech equipment, or product systems that are used in rehabilitation settings to increase, maintain, or improve functional capabilities of individuals with disabilities, emphasizing the application of clinically-based strategies for determining an individual's

need for and acceptance of adaptive technology to improve functional outcomes.

SHRS–W 561 Approaches to Rehabilitation Case Management (3 cr.) Exploring the historical perspective, technological and humanitarian advances, and major issues in the rehabilitation administrative environment; discussing and analyzing the legislative mandates relative to their effects on shaping the administrative environment in rehabilitation; acquiring knowledge of the process and significance of administrative competency in delivering services to rehabilitation consumers.

SHRS–W 562 Psychological Aspects of Disability (3 cr.) P: Medical terminology course or equivalent. Students will review medical terminology and gain an understanding of major disabling conditions, the psychological and vocational aspect of adjustment to disability and chronic long term illness, and examine psychological and social theories related to disability and chronic illness and Code of Ethics.

SHRS–W 625 Diversity Issues in Health and Rehabilitation Services (3 cr.) Designed to prepare students to formulate strategies to address the interrelationship of race, gender, culture, and ethnicity and how they affect access and use of health and rehabilitation services.

SHRS–W 640 Medical Aspects of Disabilities (3 cr.) The primary emphasis of this survey course is on medically determined aspects of disabling impairments and disabilities. Students will learn the functional limitations associated with major disabling conditions particularly as they relate to the delivery of rehabilitation services. Current trends and methodologies involved in rehabilitation processes will be covered.

SHRS–W 641 Proposal Writing for Community-Based Rehabilitation Programs (3 cr.) An interactive educational opportunity to develop skills related to fund development in a community rehabilitation setting, providing an overview of the grant development process. Students will research local and national funding sources and learn about traditional and non-traditional sources to develop and maintain community-based rehabilitation programs. Includes guest speakers.

SHRS–W 642 Practicum in Rehabilitation and Disability (3 cr.) Designed to give students direct work experience in various private and public sector rehabilitation agencies, this experiential component allows the student an opportunity to apply his/her newly acquired normative and cognitive skills and knowledge in an actual work setting.

SHRS–W 650 Global Perspectives in Nutrition, Health, Disease, and Disability (3 cr.) Major emphasis on global perspectives with specific focus on economically less developed countries, examining existing and emerging issues in international nutrition that influence the health, well-being, and disability and the efficacy and effectiveness of nutritional interventions in the prevention of disease and disability among people living in developing countries.

SHRS–W 651 International Service-Learning in Rehabilitation (3 cr.) Designed to give students direct experience in the organization and financing of rehabilitation services in other parts of the world, this experiential component allows students to apply their newly acquired normative and cognitive skills and knowledge in an international rehabilitation institution. Students will travel abroad under the supervision of faculty.

Health and Rehabilitation Sciences

SHRS–N 576 Leadership Development in Pediatric Nutrition (3 cr.) This is an entry-level leadership development series of experiential learning activities, including a leadership development project for post-baccalaureate health care professionals and fellows.

SHRS–W 660 Rehabilitation Theories and Application (3 cr.) This course explores theories common to all rehabilitation therapies and forms a foundation for rehabilitation sciences. Theories such as adaption to disease, cognition, disability, and injury are applied to rehabilitation practice and research design across the life span.

SHRS–W 661 Theories of Health Promotion and Disease Prevention (3 cr.) This course focuses on the role of health behaviors such as eating nutritious foods, exercising, and avoiding unhealthy habits, in health promotion and disease prevention. A principal concentration will be on health promotion within disabling conditions.

SHRS–W 662 Rehabilitation Services in Health Care Systems and Delivery (3 cr.) This course analyzes emerging trends in health care systems and delivery associated with rehabilitation. Areas to be covered include organizational infrastructures, finance, public policy, and implications for disparate patient populations.

SHRS–W 670 Research Practicum in Health and Rehabilitation Sciences (3–6 cr.) Instructional orientation to research; includes laboratory experience in the student's concentration area. This course may be taken more than once.

SHRS–W 672 Teaching Practicum in Health and Rehabilitation Sciences (3 cr.) Instructional teaching theories and methodologies to include teaching a unit of instruction in the student's concentration area. This course may be taken more than once. NOTE: Any student that has an interest in teaching is advised to incorporate other instructional teaching methodology courses into his/her plan of study.

SHRS–W 674 Doctoral Seminar in Health and Rehabilitation Sciences (1 cr.) During the first two years of a student's matriculation in the PhD in Health & Rehabilitation Sciences program, the student will attend a total of 12 seminars relating to some aspect of health and rehabilitation, and submit a synopsis for each.

SHRS–W 680 Independent Study in Health and Rehabilitation Sciences (1–4 cr.) A course for students interested in specific interdisciplinary topics in health and rehabilitation sciences.

SHRS–W 690 Dissertation Proposal in Health & Rehabilitation Sciences (3–6 cr.) Students will submit a written proposal for original scholarly work that makes a significant contribution to research in the field of health and rehabilitation sciences. Proposal to include

introduction to topic, literature review, and indication of methodology.

SHRS–W 692 Dissertation in Health & Rehabilitation Sciences (3–8 cr.) P: W690. Original scholarly dissertation that makes a significant contribution to the field of health and rehabilitation sciences. Topic to be selected by the student and his/her Research Committee.

Therapeutic Outcomes Research

SHRS–W 510 Trends and Issues in the Health Sciences (3 cr.) A seminar course to review pertinent literature and other sources of information as a basis for discussing trends and issues affecting the therapeutic professions and the healthcare delivery system.

SHRS–W 520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.) Fundamental concepts of research, ranging from philosophical foundations to practical applications. Course provides the conceptual framework in which graduate students may develop their own research agenda. In keeping with the diversity of research, this course strives to introduce graduate students to the entire continuum of research paradigms, from qualitative, naturalistic inquiry to quantitative, experimental designs.

SHRS–W 540 Patient-Centered Outcomes Research (3 cr.) Explorations of selected patient-centered outcomes evaluation methodology and research evidence related to the health professions at an advanced level.

SHRS–W 570 Research Communication in the Health Sciences (2–3 cr.) P: W520 and consent of both instructor and research advisor. Instruction and consultation in the preparation of master's thesis proposals, including computer applications for conducting online literature searches, developing an individual bibliographic database, designing an original research project, and devising a sound methodology. Final outcome is a completed thesis proposal for submission to a graduate student's thesis committee. Course is open only to health sciences graduate students pursuing the research/thesis track in their program of study. Students must begin the course with a specific research agenda already approved by their research advisor.

Epidemiology

School of Medicine

Department URL: http://www.pbhealth.iupui.edu
Department E-mail: pbhealth@iupui.edu

Curriculum

Degree Offered

Doctor of Philosophy

Master of Public Health, Epidemiology Concentration, Masters Degree granted by the Indiana University School of Medicine, Department of Public Health. For information on these programs, visit the Department of Public Health website, http://www.pbhealth.iupui.edu.

Special Department Requirements

(See also general University Graduate School Requirements)

The Epidemiology PhD program is designed for advanced graduate students who wish to study the distribution of health and illness in diverse populations, to study the occurrence of illness, and to assess the determinants of health and disease risk in human populations. Admission into the PhD Program is based on completion of a baccalaureate degree, although it is anticipated that many applicants will have completed a post baccalaureate degree in epidemiology or another health related discipline. Successful applicants will have demonstrated strong analytical and quantitative skills.

Admission Requirements

The application deadline for the Epidemiology PhD program is January 15 of each year for matriculation in the following fall semester. Application documents to be submitted include:

- Formal application to the Indiana University Graduate School
- Resume or curriculum vita
- Personal statement
- Three (3) letters of recommendation from people who can comment on the applicant's suitability for doctoral level studies (e.g., former professors, employers or other professionals involved in epidemiology)
- Competitive scores on the GRE, GMAT, MCAT, LSAT, or DAT. The graduate entrance exam requirement may be waived if the applicant has a graduate or professional degree from an accredited US college or university.
- TOEFL score of 213 on the computer version (or iBT equivalent of 79) required for applicants whose native language is not English
- Official transcripts from all colleges and universities attended documenting a cumulative GPA of at least a 3.0 on a 4.0 scale in all prior academic work and a letter grade of B or higher in all that fulfill prerequisites

Selected candidates will be invited for a personal interview with members of the Admissions Committee.

Course Requirements

A minimum of 90 credit hours are required for the Epidemiology PhD degree. The 90 credit hours will consist of the following:

Required Courses (31 hours): A common core of 31 credit hours is required of all students who begin the program after the completion of a bachelor's degree.

- Fundamentals of Epidemiology PBHL P517 (3 hours)
- Advanced Epidemiology PBHL P601 (3 hours)
- Epidemiology Research Methods PBHL P600 (3 hours)
- Health Outcomes Research PBHL P612 (3 hours)
- Biostatistics for Public Health I PBHL P551 (3 hours)
- Biostatistics for Public Health II PBHL P652 (3 hours)
- Design and Implementation of Observational Studies PBHL P650 (3 hours)

Required coursework still in development will address advanced public health survey methods, analysis and interpretation of observational studies, and multivariate analysis.

Methods Courses: All Epidemiology PhD students are required to complete three Epidemiology methods courses (9 credit hours). Courses that qualify to meet this requirement focus on epidemiologic surveillance systems, categorical data analysis, survival data analysis, applied spatial statistics, clinical trials, and qualitative research methods.

Substantive Courses (15 hours): All Epidemiology PhD students must take 15 hours of substantive courses to provide expertise in specific epidemiology topics. Eligible course topics include injury epidemiology, molecular and genetic epidemiology, infectious disease epidemiology, chronic disease epidemiology, cancer epidemiology, nutritional epidemiology, occupational epidemiology, pharmaco-epidemiology, genetic association studies, environmental epidemiology, cardiovascular epidemiology, and mental health and illness.

Minor Area (12 credit hours): All students must complete a minor in an area related to any of the health and life sciences. The minor may be obtained in areas such as pharmacology and toxicology, genetics, biology, physiology, bioinformatics, health economics, among many others. The minor area must be approved by the student's academic advisor or graduate committee and it must comply with the requirements of the respective department/unit.

Doctoral Seminars (3 credit hours): Students will enroll in 3 doctoral research seminars; each seminar is 1 credit, for a total of 3 credits.

Dissertation (20 credit hours): The remaining hours to total 90 will be guided research dissertation hours. The dissertation will be written on an original topic of research and presented as one of the final requirements for the PhD degree.

Qualifying Exam: All Epidemiology PhD students must pass a qualifying examination before they can proceed to their dissertation. The qualifying exam will cover the subject matter on which the dissertation work will be based and will be taken after the coursework for the PhD has been completed. Students who fail the qualifying examination are normally allowed to retake it only once. The qualifying exam will be written and oral.

Admission to Candidacy

After passing the qualifying examination and the completion of all required coursework, the student's advisory committee will nominate the student to candidacy. Upon approval by the Dean of the University Graduate School, the student will be admitted to candidacy.

Students who have passed the qualifying examination and have been admitted to candidacy must enroll each semester (excluding summer sessions) for dissertation credits. Once such students have accumulated 90 credit hours in completed course work and deferred dissertation credits, they may maintain continuous enrollment by enrolling in one credit of G901; G901 may be taken for no more than a total of six credits.

Final Examination

This is an oral examination; primarily a defense of the dissertation.

Normal Progress and Termination

The Department of Public Health will monitor the students' progress toward the PhD degree and will make recommendations to the University Graduate School regarding the nomination to candidacy, the appointment of a research committee, the defense of the dissertation, and the conferring of the PhD degree.

Faculty

Chairperson

G. Marie Swanson

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Marie Swanson*, Terrell Zollinger*

Associate Professors

Gregory Steele

Assistant Professors

Chunyan He, Jianjun Zhang, Jennifer Wessel

Courses

PBHL–P 517 Fundamentals of Epidemiology (3 cr.)
This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will gain an understanding of the role of epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

PBHL–P 551 Biostatistics for Public Health I (3 cr.)
This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression and correlation. An introduction to SAS statistical software is part of this course.

PBHL–P 600 Epidemiologic Research Methods (3 cr.)
P: G651. This course provides an in-depth presentation of the major research designs, analytical methods, and practical issues specifically related to conducting research in the field of epidemiology, outcomes research, and health economics. Descriptive, observational and experimental designs are included. In addition, issues of ethics, protocol, data quality, instrument design, and analysis are covered.

PBHL–P 601 Advanced Epidemiology (3 cr.) P: P600 (or concurrently enrolled). This course provides students with an in-depth understanding of advanced epidemiologic concepts introduced in other courses as well as a fundamental understanding of epidemiologic techniques not covered in other classes. Topics included will represent cutting edge techniques, philosophical issues and insights to appropriately conduct and interpret the findings of epidemiological studies.

PBHL–P 609 Infectious Disease Epidemiology (3 cr.) P: H517. This course is designed to provide a basic overview of the infectious disease process, including disease agents, transmission routes, immunity and public health significance. The course introduces principles of infectious disease epidemiology, including outbreak investigation and surveillance, using case studies as examples. Concepts on globalization of disease, microbial ecology, and disease eradication also are discussed.

PBHL–P 610 Chronic Disease Epidemiology (3 cr.) P: H517 or equivalent. This course examines chronic health conditions from an epidemiological perspective. Concepts include distribution; determinants; diagnosis; measures of severity; treatment modalities; surveillance measures; survival and prognosis; and quality of care measures. Research methods, prevention stratigies and screening tests are presented. Clinical experts present diagnosis and treatment methods.

PBHL–P 612 Health Outcomes Research (3 cr.) This web-based course is evidence-based and focused on health outcomes research in contemporary health care. The different types of health outcomes assessment tools and their application in determining patient health status, changes in health status, and the effectiveness of health care interventions will be addressed. The course will focus on generic and specific health related outcomes assessment tools, looking at such issues as disease specific outcomes and patient satisfaction.

PBHL–P 618 Cancer Epidemiology (3 cr.) This course is an overview of cancer epidemiology, focusing on key concepts, etiologic research, applications to public health practice and major epidemiologic methods. This course is designed for students who have an interest in epidemiology.

PBHL–P 650 Readings in Public Health (1–4 cr.) This course is designed to expose the student to different readings in public health. The course will allow the student to apply skills learned in the public health core courses by collecting data and applying techniques. The student will be required to read critically published papers and identify research topics.

PBHL–P 652 Biostatistics for Public Health II (3 cr.) P: Biostatistics for Public Health I or one semester of graduate-level biostatistics. This course introduces the advanced principles and methods of data analysis applied to public health practice. Emphasis is placed on concepts of multiple regression, analysis of variance and covariance, repeated measures analysis, logistic regression, nonparametic statistics, survival analysis, and statistics as they apply to public health practice.

PBHL–P 655 Historical Evolution of Epidemiology (1–3 cr.) This course covers the major developments in the history of epidemiology. The course is not meant to be comprehensive, but rather to provide an opportunity to follow the development of the discipline.

Health Policy Management

School of Medicine

Department URL: http://www.pbhealth.iupui.edu
Department E-mail: pbhealth@iupui.edu

Curriculum

Degrees Offered

Doctor of Philosophy

The Master in Public Health, Health Policy and Management Concentration; Master in Health Administration; . Masters degrees are d granted by the Indiana University School of Medicine, Department of Public Health. For information on these programs, visit the Department of Public Health website, http://www.pbhealth.iupui.edu.

Special Department Requirements

(See also general University Graduate School Requirements)

The Health Policy and Management PhD program is designed for advanced graduate students who wish to be prepared to conduct research and take leadership roles in health policy, health services, and health care management. Completion of a baccalaureate degree is required and professional experience in public health is preferred. It is anticipated that many applicants will have a post-baccalaureate degree in public health, other health related disciplines, behavioral or social science, law, or business or health administration.

Admission Requirements

The application deadline for the Health Policy and Management PhD program is January 15 of each year for matriculation in the following fall semester. Application documents to be submitted include:

- Formal application to the Indiana University Graduate School
- Resume or curriculum vita
- Personal statement
- Sample of scholarly writing
- Three (3) letters of recommendation from people who can comment on the applicant's suitability for doctoral level studies (e.g., former professors, employers or other professionals involved in health policy and management)
- Personal interview
- Competitive scores on the GRE, GMAT, MCAT, LSAT, or DAT
- TOEFL score of 213 on the computer version (or iBT equivalent of 79) required for applicants whose native language is not English
- Cumulative GPA of at least a 3.0 on a 4.0 scale in all prior academic work and a letter grade of B or higher in all courses serving toward prerequisites, as documented by official transcripts from all colleges and universities attended.

Selected candidates will be invited for a personal interview with members of the Admissions Committee.

Course Requirements

A minimum of 90 credit hours are required for the Health Policy and Management PhD degree. The 90 credit hours will consist of the following:

Required Courses (33 hours): A common core of 11 classes (33 credit hours) is required for all students who begin the Health Policy and Management PhD program after the completion of a bachelor's degree. Required courses will include:

Course Name, Course level, Credit hours

- US Health Care: Systems, Policies and Ethical Challenges P504 or H501 (3 hours)
- Health Economics H514 (3 hours)
- Biostatistics for Public Health I P551 (3 hours)
- Biostatistics for Public Health II P652 (3 hours)
- Health Outcomes Research 600 (3 hours)

Required courses still under development will address contemporary challenges in health policy and management; ethical, legal and policy issues in public health; global perspectives on health policy and health systems; health services research methods; and practical experiences in health policy and management.

Methods Elective Courses: All Health Policy and Management PhD students are required to complete three Methods courses (9 credit hours). Students may select courses on management science for health administration, cost-effective analysis, action research and community health policy, health care financial management, applied spatial statistics, qualitative research methods, advanced public health survey methods, analysis of cohort studies, multivariate analysis, or organizational research methods.

Substantive Courses (9 credit hours): All Health Policy PhD students must take 9 hours of substantive elective courses. Students may choose courses on the history of public health, strategic management in healthcare, ethical and policy issues in international research, public health law, health informatics, mental health and addictions, public health genomics, or long-term care policy.

Minor Area (12 credit hours): All students must complete a minor in any area related to a health and life science. The minor choice must be approved by the student's advisor. Examples of minors include: bioethics, international research ethics, biostatistics, epidemiology, health economics, medical sociology, medical anthropology, nursing administration, business administration, and bioinformatics. The minor must contain a minimum of four graduate level courses (12 credit hours) in the chosen area and comply with the minor requirements of the respective department/unit.

Doctoral Seminars (4 credit hours): Students will enroll in 4 doctoral research seminars; each seminar is 1 credit for a total of 4 credits.

Dissertation (23 credit hours): The remaining hours to total 90 will be guided research dissertation hours. The dissertation will be written on an original topic of research and presented as one of the final requirements for the PhD degree.

Qualifying Exam

All Health Policy and Management PhD students must pass a qualifying examination before they can proceed to their dissertation. The qualifying exam will cover the subject matter on which the dissertation work will be based and will be taken after the coursework for the PhD has been completed. Students who fail the qualifying examination are normally allowed to retake it only once. The qualifying exam will consist of written and oral components.

Admission to Candidacy

Following the passing of the qualifying examination and the completion of all required coursework, the student's advisory committee will nominate the student to candidacy. Upon approval by the dean of the University Graduate School, the student will be admitted to candidacy.

Students who have passed the qualifying examination and have been admitted to candidacy must enroll each semester (excluding summer sessions) for dissertation credits. Once such students have accumulated 90 credit hours in completed course work and deferred dissertation credits, they may maintain continuous enrollment by enrolling in one credit of G901; G901 may be taken for no more than a total of six credits.

Dissertation

The dissertation will be written on an original topic of research and presented as one of the final requirements for the Ph.D. degree. The student's dissertation research committee will be comprised of members of the graduate faculty. The chair of the dissertation research committee must be a regular faculty member in the Department of Public Health and a full member of the Graduate Faculty. The student will submit to the IUPUI Graduate Office, acting for the University Graduate School, a two-page prospectus of the dissertation research and the membership of the research committee at least six months before the defense of the dissertation for their approval.

When the dissertation has been completed and approved by the dissertation research committee chair, the student will submit an unbound copy to each member of the research committee as the initial step to the dissertation defense.

After the committee has reviewed the dissertation, the decision to schedule the defense will be made. The student will then present and defend the dissertation orally in a public forum before the committee. Following the dissertation defense, all deficiencies must be adequately addressed to obtain approval by the dissertation research committee.

Final Examination

This is an oral examination, primarily a defense of the dissertation.

Normal Progress and Termination

The Department of Public Health will monitor the students' progress toward the PhD degree and will make recommendations to the University Graduate School regarding the nomination to candidacy, the appointment of

a research committee, the defense of the dissertation, and the conferring of the PhD degree.

Faculty

Chairperson

G. Marie Swanson

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.

Professors

Eric Wright*

Associate Professors

Ann Holmes*, Nancy Swigonski

Assistant Professors

Alejandro Arrieta

Courses

PBHL–H 501 U.S. Health Care: Systems, Policies, and Ethical Challenges (3 cr.) This course explores components of the healthcare system and associated managerial challenges.. Ideological paradigms that predict utilization and health behaviors, guidelines for ethical analysis, the policy process, interaction of federal, state, and local politics in formation of policies, and theoretical assumptions associated with major policy models are included.

PBHL–H 504 U.S. Health Care Systems and Health Policy (3 cr.) This we supported course explores the U.S. health care system, policy development, and ethical challenges. It examines the policy process at national, state, and local levels will be analyzed using legislation and related activities.

PBHL–H 514 Health Economics (3 cr.) P: An introductory micro-economics course. This 3 hour course examines the principles and application of economic analysis in the health field and the economist's approach to health care issues. Insights offered by economic analysis of specific health issues and problems are provided.

PBHL–P 612 Health Outcomes Research (3 cr.) This web-based course is evidence-based and focused on health outcomes research in contemporary health care. The different types of health outcomes assessment tools and their application in determining patient health status, changes in health status, and the effectiveness of health care interventions will be addressed. The course will focus on generic and specific health related outcomes assessment tools, looking at such issues as disease specific outcomes and patient satisfaction.

PBHL–P 632 History of Public Health (3 cr.) This course surveys the history of public health from antiquity to the early twenty-first century with the aim of providing students with an understanding of how history may inform present day challenges regarding the health of populations, including emerging infectious diseases; climate change; and dislocation from conflicts.

PBHL–P 650 Readings in Public Health (1–4 cr.) This 3 hour variable topics course is used to offer students the opportunity to examine in-depth emergent topics in health policy and management. The topics will be approved by the health policy and management faculty and offered on as needed-basis.

PBHL–P 652 Biostatistics for Public Health II (3 cr.) P: P651. This 3 hour course introduces the advanced principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as: multiple regression, analysis of variance and covariance, logistic regression, nonparametric statistics, survival analysis, statistics used in epidemiology, and repeated measures analysis.

PBHL–P 657 Application of Cost-Effectiveness Analysis in Public Health (3 cr.) Cost-effectiveness analysis is widely used in evaluating the performance of public health programs and policies. In this course, students will learn to frame the conceptual model, to collect and synthesize data regarding "cost" and "effectiveness", to perform a cost-effectiveness analysis, and to form recommendations based on the analysis.

Kokomo

Liberal Studies

School of Arts and Sciences

Departmental E-mail: alkiser@iuk.edu

Departmental URL: http://www.iuk.edu/~koartsci/MSLiberalStudies.shtml

Curriculum

Degree Offered

Master of Liberal Studies

General Information

The Master's of Liberal Studies (M.L.S.) offers three different tracks:

- **INTERDISCIPLINARY TRACK**: Provides students with the opportunity to take an individualized program of graduate courses and interdisciplinary core seminars in a variety of disciplines in the arts and sciences. Students identify and explore significant patterns and connections that exist among the diverse disciplines that define current knowledge. The curriculum includes carrying out independent work, including the design and execution of projects
- **ACADEMIC TEACHING TRACK**: Provides students with academic teaching training in the form of teaching assistantships and subject content in the field of their choice (English, Communication Arts are the most popular)
- **GLOBAL STUDIES TRACK**: Provides students with a deeper understanding of international issues such as multiculturalism, conflict resolution, human rights, energy, and the environment.

Students begin with an introduction to graduate liberal studies and interdisciplinary methodology, then choose one of the three tracks. The M.L.S. program draws on

faculty with diverse expertise to explore topics through a multidisciplinary approach.

Admission Requirements

Students are admitted to the Master of Liberal Studies program by the Graduate Liberal Studies Committee of the College of Liberal Arts and Sciences. In order to be admitted to this program, a student is expected to have earned a baccalaureate degree (B.A. or B.S.) from an accredited college or university with an overall grade point average of at least 3.0 on a 4.0 scale. Students who do not meet the GPA requirement may be admitted provisionally upon the recommendation of the director of the M.L.S. program and or the Graduate Liberal Studies Committee. Completed applications include the following: application form, application fee, cover letter, at least two letters of recommendation, a writing sample, scores from the Graduate Record Exam (GRE) or equivalent graduate exam scores, and transcripts of all previous undergraduate and graduate study.

A student whose native language is not English must have a minimum TOEFL score of 560 (standard grading) or 220 (computer graded). The recommended TOEFL score is 600 (standard grading) or 250 (computer graded). Exceptions to these requirements may be made at the discretion of the graduate liberal studies committee.

Application Deadlines

Students may be admitted to the M.L.S. Program to begin in either the fall or spring semester. All admission decisions are made by the faculty members of the Liberal Arts and Sciences Graduate Liberal Studies Committee. The committee meets to review applications three times each year. The deadlines for submitting completed applications for review by the committee are as follows: Fall application deadline is July 15; the Spring application deadline is November 15.

Students are advised to give reference letter writers at least two to four weeks' notice so that their letters will arrive prior to the deadline. Applications that are not completed by a given deadline will not be considered until the next deadline and may cause a delay in admission by one semester.

Track Requirements

Interdisciplinary Track:

Completion of 30 hours of graduate coursework

A minimum GPA of 3.0 is required for graduation. If a student drops below a 3.0 GPA in any given semester, they could be dismissed from the program. Only courses with a minimum grade of "B-" will count towards the degree.

Coursework: D510-Introduction to MLS Graduate Studies in first fall semester (3 hours)

Area of Concentration (21 hours)
(Courses must come from the Humanities, Social and Behavioral Sciences, or Natural, Information and Mathematical Sciences.) The completion of a thesis (6 hours): D601 Thesis Proposal (3 hours) and D602 Thesis Writing (3 hours)

Academic Teaching Track (English, Communication Arts and other disciplines):

1. Completion of 31 hours of graduate coursework;
2. A minimum GPA of 3.0 is required for graduation. If a student drops below a 3.0 GPA in any given semester, they could be dismissed from the program;
3. Only courses with a minimum grade of "B-" will count towards the degree.

Coursework:

- D510 Introduction to MLS Graduate Studies in first fall semester (3 hours)

Area of Concentration (16 hours)

- D591 Teaching Practicum (1 hour)
- D550 (6 hours) Teaching Assistantships (two, 3 hours each)

Requirements for this track also include a teaching portfolio as part of the thesis.

Global Studies Track:

1. Completion of 30 hours of graduate coursework;
2. A minimum GPA of 3.0 is required for graduation. If a student drops below a 3.0 GPA in any given semester, they could be dismissed from the program;
3. Only courses with a minimum grade of "B-" will count towards the degree.

Coursework

- D510 Introduction to MLS Graduate Studies in first fall semester (3 hours)

Area of Concentration (16 hours)

- D514 Graduate Liberal Overseas Study (6 hours)

The completion of a thesis (6 hours): D601 Thesis Proposal (3 hours) and D602 Thesis Writing (6 hours). Requirements for this track also include a travel portfolio.

Academic Curriculum (33 cr.) (All courses are 3 credit hours unless otherwise designated.). After successfully passing the introductory course and the core seminar requirements for the program, students may select from one of two options to complete their M.L.S. degree, thesis or non-thesis option.

THESIS OPTION:

- D510 Introduction to Graduate Liberal Studies

Core Seminars

- D501 Humanities Seminar
- D502 Social Sciences Seminar
- D503 Science Seminar

Each of the core courses is a graduate seminar combining detailed study of particular topics with broad interdisciplinary perspectives. These courses give students the opportunity to explore the connections that exist among the diverse discipline and perspectives that define contemporary knowledge.

Electives (9 hours)

- D511 M.L.S. Humanities Elective
- D512 M.L.S. Social Science Elective
- D513 M.L.S. Science Elective
- D514 Graduate Liberal Studies Overseas Study

Six hours must be in two of the three departments.

Electives offer students a wide variety of choices with which to create programs of study suited to their individual interests. These elective courses may be selected to build support and background for the graduate project, or to enable students to more ably participate in the public intellectual, artistic, and cultural life of their communities. Students may repeat the elective courses under a different topic.

THESIS - 6 hours of thesis work or a capstone project/ Thesis/Creative Activity
The Thesis/Creative Activity Option offers students the opportunity to work closely with a faculty committee and to complete a thesis designed around their unique interests.

Non-Thesis Option:
Students may select the option of taking twelve graduate hours in lieu of the thesis work or capstone project: six hours replacing the thesis/capstone project plus an additional six hours of coursework. Their work will be assessed by a portfolio.

Academic Regulations

Students must have their programs of study approved by the M.L.S. program director. An average grade of B (3.0) is required for graduation, and no course with a grade lower than B– (2.7) will be counted toward the degree. Students are required to retain good academic standing, i.e., to maintain a GPA of at least 2.7. Failure to maintain good standing may result in dismissal from the program.

Other academic regulations and policies are established by the Graduate Liberal Studies Committee of the School of Arts and Sciences. Students are to consult the M.L.S. program director for further information.

Faculty

Graduate Director

Assistant Professor Eva White

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Richard Aniskiewicz, Steve R. Cox*, Robert A. Dibie, Gary E. Dolph*, Kasem K. Kasem*, Marilyn R. Kintzele, Mohammad Z.
Meybodi*, Kathy Parkison, David Rink, Dianne Roden*, John M. Ross*, Michael Tulley*, Earl Wysong*

Associate Professors

Angela Becker, Sharon K. Calhoon, Ann M. Cameron, Christian Chauret*, Michael S. Finkler, Stuart Green, Nancy Greenwood, Mary E. Hansen, Susan Hendricks, Kathryn M. Holcomb, Scott L. Jones, Nadene A. Keene, Ligaya McGovern*, Donna R. McLean, Julie R. Saam, Susan M. Sciame, Robert A. Strikwerda, Robin Symonds, Julia Tinsley, Linda S. Wallace, Carl Widland

Assistant Professors

Karl L. Besel, Mary P. Bourke, Matthew T. Bradley, Kelly L. Brown, Dmitriy Chulkov, Kevin M. Clark, Chris R. Darr, Minda Douglas, Christina A. Downey, Linda S. Ficht*, Melissa M. Grabner-Hagen, Sarah E. Heath, Joe Keener, Joung Yeo Kim*, Andrew M. McFarland, Raul A. Mosley, Patrick M. Motl, Yusuf A. Nur, Masato Ogawa, Amber Reed, Kareem M. Shabana, Gregory Steel, Eva R. White, Songwen Xie

Courses

LBST–D 501 Humanities Seminar (3 cr.) An interdisciplinary graduate seminar in the humanities. Topics vary from semester to semester.

LBST–D 502 Social Science Seminar (3 cr.) An interdisciplinary graduate seminar in the social sciences. Topics vary from semester to semester.

LBST–D 503 Science Seminar (3 cr.) interdisciplinary graduate seminar in the sciences. Topics vary from semester to semester.

LBST–D 510 Introduction to Graduate Liberal Studies (3 cr.) A comprehensive introduction to graduate liberal studies. Explores the cultures of the humanities, social sciences, and sciences. Investigates interdisciplinary methodologies. Offers strategies for graduate-level reading, research, and writing for other publics.

LBST–D 511 M.L.S. Humanities Elective (3 cr.) P: D510. An M.L.S. graduate elective course in the humanities. Topics vary.

LBST–D 512 M.L.S. Social Science Elective (3 cr.) P: D510. An M.L.S. graduate elective course in the social sciences. Topics vary.

LBST–D 513 M.L.S. Science Elective (3 cr.) P: D510. An M.L.S. graduate elective course in the sciences. Topics vary.

LBST–D 514 Graduate Liberal Overseas Study (3–6 cr.) P: D510. This course will enable M.L.S. students to participate in overseas studies. In some cases there may be a language prerequisite.

LBST–D 594 Liberal Studies Directed Readings (1–3 cr.) P: D510 and prior consent of instructor. Independent study involving systematic schedule of readings sponsored and supervised by a faculty member.

LBST–D 596 Liberal Studies Independent Research (1–3 cr.) P: D510 and prior consent of instructor. An independent research project formulated and conducted in consultation with a faculty member and culminating in a final analytical paper.

LBST–D 600 Public Intellectual Practicum (3 cr.) P: Completion of all M.L.S. course work. A capstone seminar for the M.L.S. public intellectual option. Students will study the history of public intellectuals, explore the variety of ways in which public intellectuals carry out their work, and create a portfolio of their own public intellectual work.

LBST–D 601 Thesis Proposal (3 cr.) P: Completion of all M.L.S. course work. Independent research/creative activity in which students choose a topic for their thesis , complete the initial research to determine its feasibility, write a formal proposal with an extensive bibliography identifying sources and/or resources necessary to complete the project, and defend it before a faculty committee.

LBST–D 602 Thesis Writing (3 cr.) P: D601. Complete the writing of the thesis in consultation with a thesis committee, and defendit before the thesis committee.

Northwest

Liberal Studies

College of Liberal Arts and Sciences

Degree Offered

Master of Liberal Studies

General Information

The Master of Liberal Studies (M.L.S) program is unique. It does not provide a rigid schedule of courses or focus on one particular specialty. It is inherently interdisciplinary. It is designed for students who love to learn new ideas and discuss them with others. It is designed for students who are curiosity about the world – about art, literature, science, politics, human nature and history. It is for people who want to explore new worlds and who enjoy meeting others who want to join the expedition. It is designed for students who wish to combine several academic areas into one tailored degree program. Students select a sequence of graduate level courses to create their own path of study. It allows students to explore questions of enduring concern and contemporary urgency in the arts, humanities, behavioral sciences, social sciences, life sciences, and physical sciences. In doing so, the program provides students with opportunities to engage their curiosity in an intellectual exploration of the world of ideas. The rewards of the pursuit of knowledge go beyond intellectual satisfaction. Students will gain fresh perspectives and will hone the creative, critical thinking, decision making, analytical, and communication skills that are so valued in today's workplace. Uniquely among graduate programs, the M.L.S helps students understand the broader context of their ideas, path of study, and fields of work, learn to analyze problems from a variety of perspectives, will stimulate students to find connections between their studies and their personal and professional lives, and encourages a lifelong commitment to learning, free inquiry and the life of the mind.

Admission Requirements

Students are admitted to the Master of Liberal Studies program by the Graduate Admission Committee of the College of Arts and Sciences. To be considered for admission, students must hold a bachelor's degree from an accredited institution and should have obtained an undergraduate grade point average of at least 3.0.

Academic Curriculum

The M.L.S. requires the completion of 10 courses (30 credits). Students begin with an introduction to graduate liberal studies and interdisciplinary methodology, and then enroll in at least three core seminars in the humanities, the sciences, and the social sciences. Seminars combine detailed study of a particular topic with a broad interdisciplinary examination of ways of understanding. The M.L.S. program draws on faculty with diverse expertise to explore topics through a multidisciplinary approach. The program is designed to allow students flexibility to fashion a course of study that blends their interests, talents and experience. Students, under guidance of their faculty advisor, may choose graduate courses and seminars in a variety of disciplines within the College of Arts and Sciences. The program culminates with a thesis or alternative project that will grow out of the information and methodologies acquired throughout the course work.

Core Seminars

- LIBS D502 Social Sciences Seminar (3 cr.)
- LIBS D503 Science Seminar (3 cr.)

Each of the core courses is a graduate seminar combining detailed study of particular topics with broad interdisciplinary perspectives. These courses give students the opportunity to explore the connections that exist among the diverse discipline and perspectives that define contemporary knowledge.

Electives

- LIBS D511 M.L.S. Humanities Elective (1-4 cr.)
- LIBS D512 M.L.S. Social Science Elective (1-4 cr.)
- LIBS D513 M.L.S. Science Elective (1-4 cr.)

Electives offer students a wide variety of choices with which to create programs of study suited to their individual interest. These elective courses may be selected to build support and background for the graduate project, or to enable students to more ably participate in the public intellectual, artistic, and cultural life of their communities. In addition to the above, students may also repeat core seminars (each may be taken up to two more times under a different topic).

Independent Research/Creative Activity Option

The Independent Research/Creative Activity Option offers students the opportunity to work closely with a faculty committee and to complete a final project designed around their unique interests. Students must take 12 credits of electives and then successfully complete their program with a graduate project. The graduate project is an independent scholarly enterprise in which the student demonstrates mastery of a specific topic. Examples include a thesis, a computer program, a translation of a work of literature, or an artistic composition or performance.

Capstone Experience

- LIBS D601 M.L.S. Project Proposal Seminar (3 cr.)
- LIBS D602 Graduate Project (6 cr.)

Public Intellectual Option

Upon completion of two additional core seminars and 12 credits of electives, the Public Intellectual Option offers students the opportunity to work within a learning community made up of other students and led by a faculty facilitator to explore the variety of genres through which public intellectuals communicate, and to create their own portfolio of public intellectual work to be submitted for completion of the M.L.S. degree.

Capstone Experience

- LIBS D600 Public Intellectual Practicum (3 cr.)

Academic Regulations

Students must have their programs of study approved by the M.L.S. program director.

Courses taken for graduate credit at the 300 or 400 level include additional assignments beyond those required for undergraduate credit. Enrollment in such courses requires the approval of the instructor and of the M.L.S. program director. Students may take up to 9 credit hours of electives in a single academic program.

An average grade of B (3.0) is required for graduation, and no course with a grade lower than B– (2.7) will be counted toward the degree. Students are required to retain good academic standing, i.e., to maintain a GPA of at least 2.7. Failure to maintain good standing may result in dismissal from the program. Other academic regulations and policies are established by the Graduate Liberal Studies Committee of the College of Arts and Sciences. Students should consult the M.L.S. program director for further information.

LIBS–D 503 Science Seminar (3 cr.) An interdisciplinary graduate seminar in the sciences. Topics vary from semester to semester.

LIBS–D 511 M.L.S. Humanities Elective (1–4 cr.) P: LIBS-D 510. An M.L.S. graduate elective course in the humanities. Topics vary.

LIBS–D 512 M.L.S. Social Science Elective (1–4 cr.) P: LIBS-D 510. An M.L.S. graduate elective course in the social sciences.

LIBS–D 513 M.L.S. Science Elective (1–4 cr.) P: LIBS-D 510. An M.L.S. graduate elective course in the sciences.

LIBS–D 502 Social Science Seminar (3 cr.) An interdisciplinary graduate seminar in the sciences. Topics vary from semester to semester.

South Bend

English

College of Liberal Arts and Sciences

Departmental URL: www.iusb.edu/~sbeng

Contact Information
Department of English
Wiekamp Hall 3127
Indiana University South Bend
1700 Mishawaka Avenue
South Bend, IN 46634-7111
(574) 520-4304

Curriculum

Degrees Offered

Master of Arts (M.A.) and Master of Arts in Teaching English (M.A.T.)
Note: Department is not currently admitting students to the M.A.T. program.

Special Departmental Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Students are admitted to the English graduate program by the Graduate Studies Committee. Applicants for the program must have a bachelor's degree in English or in a closely related field from an accredited institution and an undergraduate GPA of at least 3.0. M.A.T. candidates must have a teacher's certificate from Indiana or another state in the U.S. A candidate who does not meet the GPA requirement may apply for special student status.

Degree Requirements

Master of Arts in English
The M.A. offers a flexible program of study and provides broad expertise in English studies including literary analysis, composition, and creative writing. Students may choose up to five elective courses, which will allow them more opportunities to shape their course of study. The M.A. degree opens employment opportunities teaching English in schools or community colleges, working in the service and information industries, the news media, advertising, public relations, and in other corporations requiring writing specialists. It also offers a life-enriching continuation of intellectual study. To complete this degree, students must meet the course requirements listed below.

M.A. Course Requirements (36 credit hours)

- G660 Stylistics (4 cr.)
- L501 Professional Scholarship in Literature (4 cr.)
- L502 Contexts for the Study of Writing (4 cr.)
- L590 Internship in English or one elective course (4 cr.)
- Four elective courses, at least two of which must emphasize textual analysis (16 cr.)*

* Courses that emphasize textual analysis include graduate literature courses and other courses so designated in the semester course offerings mailed to students.

+ A student who wishes to complete a creative writing-based Independent Writing Project must take a total of three writing workshops in at least two genres. Any one of those courses may be taken twice for graduate credit.

Master of Arts in Teaching
Note: Department is not currently admitting students into this program.

The M.A.T. provides a specialized option for certified teachers seeking graduate credentials. This degree deepens the range of expertise that a teacher brings to the classroom, better qualifies a certified teacher to find employment in the schools and at the community college level, and enhances a teacher's performance in a current position. Applicants interested in pursuing this degree must have their teaching certification prior to applying for the program. If an applicant is in the process of completing certification, he or she may petition to enter the program by identifying the number of hours remaining and producing a plan showing how the candidate will complete those hours within two academic years. To complete this degree, students must meet the course requirements listed below.

M.A.T. Course Requirements (36 credit hours)

- L501 Professional Scholarship in Literature (4 cr.)
- L502 Contexts for the Study of Writing (4 cr.)
- Two of the following courses (8 cr.): G522 Linguistics and the Teacher of English, W500 Teaching Composition: Issues and Approaches, or L553 Studies in Literature
- Writing Workshop (4 cr.) (W511 Writing Fiction, W513 Writing Poetry, or W615 Writing Creative Nonfiction)
- L590 Internship in English (4 cr.)(Candidates who have successfully petitioned to complete their certification while enrolled in the M.A. program may use student teaching to fulfill the internship requirement.)
- Two elective courses in literature or writing (8 cr.)
- Independent Writing Project (4 cr.)

Foreign Language Requirement

Students must have completed two college semesters of a single foreign language by the time the M.A. or M.A.T. degree is conferred. Candidates who have completed these two courses as part of other graduate or undergraduate programs need not take additional courses as part of the M.A. or M.A.T. program. Candidates who have gained foreign language skills outside of the classroom may take a Foreign Language Placement Exam to demonstrate their achievement of language skills equivalent to those achieved from two semesters of formal study.

Transfer Credits

Applicants may be allowed to transfer up to two graduate courses or 8 credit hours from another graduate institution (or from previous graduate work at IUSB) if those courses demonstrably contribute to the work required for the English M.A. Unless transfer courses are clearly equivalent to the required core courses for the M.A., those courses will be counted as electives. Candidates should include in the application a request to transfer courses, a brief description of each course identifying how it contributes to the English M.A., and supporting documentation such as syllabi, assignments, papers, or other relevant material.

Academic Regulations

Students must confer with their academic advisors on a regular basis to determine an effective course of study. An average grade of B (3.0) is required for graduation, and no course with a grade lower than B– (2.7) will be counted toward the degree. Students are required to maintain good academic standing, i.e., to maintain a GPA of at least 2.7. Failure to maintain good standing may result in dismissal from the program.

Faculty

Chairperson

Associate Professor Elaine Roth

Director of Graduate Studies

Associate Professor Karen Gindele

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Eileen T. Bender* (Emerita), Gabrielle Robinson* (Emerita), Margaret Scanlan* (Emerita), Frances Sherwood (Emerita), Miriam Shillingsburg* (Emerita), Tom VanderVen (Emeritus)

Associate Professors

James E. Blodgett (Emeritus), Rebecca Brittenham, Joseph R. Chaney, Karen Gindele, Charles Harrington (Emeritus), Eleanor Lyons (Emerita), Elaine Roth, Ken Smith

Assistant Professors

Chu He, Lee Kahan, Jake Mattox, Robert Meyer-Lee, Kelcey Parker

Courses

ENG–D 600 History of the English Language (3–4 cr.) Survey of the evolution of the English language from its earliest stages to the present, with reference to its external history and to its phonology, morphology, syntax, and vocabulary.

ENG–G 552 Linguistics and the Teacher of English (4 cr.) Topics in applied English linguistics, intended for English teachers at all levels.

ENG–L 501 Professional Scholarship in Literature (4 cr.) Instruction in the materials, tools, and methods of research. The course is especially designed to familiarize beginning graduate students with the research expectations associated with graduate study in literature.

ENG–L 502 Contexts for Study of Writing (4 cr.) Historical and cognitive effects of writing, reading, and language use, and the implications of these effects for the teaching and study of literature and writing. Special emphasis will be placed on the history and psychology of literacy.

ENG–L 590 Internship in English (4 cr.) A supervised internship in the uses of language in the workplace. Each intern will be assigned a problem or task and will develop the methods for solving or completing it. Each intern will complete a portfolio of workplace writing and self-evaluation.

ENG–L 623 English Drama from the 1590s to 1800, Exclusive of Shakespeare (4 cr.) P: Familiarity with half a dozen plays of Shakespeare.

ENG–L 625 Shakespeare (4 cr.) Critical analysis of selected texts.

ENG–L 631 English Literature 1660–1790 (4 cr.) Extensive reading in poetry and nonfictional prose.

ENG–L 639 English Fiction to 1800 (4 cr.)

ENG–L 642 Studies in Romantic Literature (4 cr.) An advanced survey of the literature and writings of the major writers of the British Romantic movement, including Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

ENG–L 647 Studies in Victorian Literature (4 cr.) Study of one writer, a group of writers, or a theme or form significant to the period. Course may be repeated once for credit with a different topic.

ENG–L 653 American Literature 1800-1900 (4 cr.) Intensive historical and critical study of all genres from Washington Irving through Frank Norris.

ENG–G 660 Stylistics (4 cr.) Survey of traditional and linguistic approaches to the study of prose and poetic style. Attention will center on the description of the verbal characteristics of texts, what those characteristics reflect about the author, and how they affect the reader.

ENG–L 674 Studies in International English Literature (4 cr.) Literatures from Africa, the Caribbean Islands, Australia, New Zealand, the Pacific Islands, the Indian subcontinent, or Canada.

ENG–L 680 Special Topics: Literary Study and Theory (4 cr.) Readings in sociological, political, psychological, and other approaches to literature.

ENG–L 681 Genre Studies (Variable title: e.g., The Epic) (4 cr.)

ENG–L 695 Individual Readings in English (1–4 cr.)

ENG–W 500 Teaching Composition: Issues and Approaches (4 cr.) Consideration of fundamental issues in the teaching of writing and the major approaches to composition instruction. Specific topics include teaching invention and revision, diagnosing errors, teaching style and organization, making assignments, and evaluating student writing.

ENG–W 511 Writing Fiction (4 cr.)

ENG–W 513 Writing Poetry (4 cr.) Poetry writing workshop on the study of prosody and form (including formal elements of free verse) in the context of writing by class members.

ENG–W 553 Theory and Practice of Exposition (1–3 cr.) Primarily for secondary-school and junior-college teachers of English.

ENG–W 609 Directed Writing Projects (4 cr.)

ENG–W 615 Writing Creative Nonfiction (4 cr.) Writing workshop in such modes as personal essay, autobiography, and documentary.

CMLT–C 603 Topics in Comparative Literature Studies (4 cr.) Explores specific problems between two literatures or between literature and another area in the humanities.

ENG–L 660 Studies in American Literature 1900–Present (4 cr.) Intensive study of one writer, a group of writers, or a theme or form significant to the period.

Liberal Studies

College of Liberal Arts and Sciences

Departmental E-mail: jchaney@iusb.edu

Curriculum

Graduate Director

Associate Professor Joseph Chaney, 3169 Wiekamp Hall, (574) 520-4870

General Information

The Master of Liberal Studies (M.L.S.) program in the College of Liberal Arts and Sciences provides opportunities to engage your curiosity in an intellectual exploration of the world of ideas. But the rewards of the pursuit of knowledge go beyond intellectual satisfaction. You will gain a refreshed approach to an enriched personal and professional life through a program that reinvigorates curiosity and creativity. You'll gain fresh perspectives and the critical thinking, analytical, and communication skills so valued in today's workplace.

Students begin with an introduction to graduate liberal studies and interdisciplinary methodology, and then enroll in at least three core seminars in the humanities, the sciences, and the social sciences. Seminars combine detailed study of a particular topic with a broad interdisciplinary examination of ways of understanding. The M.L.S. program draws on faculty with diverse expertise to explore topics through a multidisciplinary approach.

Admission Requirements

Students are admitted to the Master of Liberal Studies program by the Graduate Liberal Studies faculty of the College of Liberal Arts and Sciences. To be considered for admission, students must hold a bachelor's degree from an accredited institution and must have obtained an undergraduate grade point average of at least 3.0.

A student whose native language is not English must have a minimum TOEFL score of 560 (standard grading) or 220 (computer graded). The recommended TOEFL score is 600 (standard grading) or 250 (computer graded). Exceptions to these requirements may be made at the discretion of the Graduate Liberal Studies faculty.

Application Deadlines

Students may be admitted to the M.L.S. program to begin in either the fall or spring semester. All admission decisions are made by the members of the Liberal Arts and Sciences Graduate Liberal Studies faculty. The committee meets to review applications three times each year. The deadlines for submitting completed applications for review by the committee are as follows:

- March 31 Early admission, fall semester
- August 1 Final admission, fall semester
- October 31 Admission, spring semester

Students wishing to enter in the fall are strongly encouraged to submit their materials by the March 31 early admission deadline to assure there will be an opening in the program. Students are also advised to give reference letter writers at least two to four weeks' notice so that their letters will arrive prior to the deadline. Applications that are not completed by a given deadline will not be considered until the next deadline and may cause a delay in admission by one semester. Completed applications include the following:

- Application form
- Personal essay
- Three letters of reference
- Transcripts of all previous undergraduate study
- Application fee

All students wishing to enter the program should contact the director before submitting an application.

Master of Liberal Studies Degree

Academic Curriculum (34 cr.)

(All courses are 3 credit hours unless otherwise designated.)

After successfully passing the introductory proseminar and the core seminar requirements for the program, students may select from one of two options to complete their M.L.S. degree.

Proseminar

- D510 Introduction to Graduate Liberal Studies
- Q510 Topics in Information Literacy (1 cr.)

Core Seminars

- D501 Humanities Seminar
- D502 Social Sciences Seminar
- D503 Science Seminar

Each of the core courses is a graduate seminar combining detailed study of particular topics with broad interdisciplinary perspectives. These courses give students the opportunity to explore the connections that exist among the diverse disciplines and perspectives that define contemporary knowledge.

Electives

- D511 M.L.S. Humanities Elective
- D512 M.L.S. Social Science Elective
- D513 M.L.S. Science Elective
- D514 Graduate Liberal Studies Overseas Study
- D594 Liberal Studies Directed Readings*
- D596 Liberal Studies Independent Research*

Electives offer students a wide variety of choices with which to create programs of study suited to their individual interests. These elective courses may be selected to build support and background for the graduate project or to enable students to participate more ably in the public intellectual, artistic, and cultural life of their communities. In addition to the above, students may also repeat core seminars (each may be taken up to two more times under a different topic) and/or take graduate courses from other IU South Bend departments, divisions, and schools.*

To complete the Master of Liberal Studies degree, students must choose one of the following curricular options:
Independent Research/Creative Activity Option (34 cr.)

The Independent Research/Creative Activity Option offers students the opportunity to work closely with a faculty committee and to complete a final project designed around their unique interests. Students must take 12 credits of electives and then successfully complete their program with a graduate project. The graduate project is an independent scholarly enterprise in which the student demonstrates mastery of a specific topic. Examples include a thesis, a computer program, a translation of a work of literature, or an artistic composition or performance.

Electives (12 cr.)

Capstone Experience (9 cr.)

- D601 M.L.S. Project Proposal Seminar (3 cr.)
- D602 Graduate Project (6 cr.)

Public Intellectual Option (34 cr.)

Upon completion of two additional core seminars and 12 credits of electives, the Public Intellectual Option offers students the opportunity to work within a learning community made up of other students and led by a faculty facilitator to explore the variety of genre through which public intellectuals communicate, and to create their own portfolio of public intellectual work to be submitted for completion of the M.L.S. degree.

Additional Core Seminars (6 cr.)

Electives (12 cr.)

Capstone Experience (3 cr.)

- D600 Public Intellectual Practicum (3 cr.)

Academic Regulations

Students must have their programs of study approved by the M.L.S. program director.

An average grade of B (3.0) is required for graduation, and no course with a grade lower than B– (2.7) will be counted toward the degree. Students are required to retain good academic standing, i.e., to maintain a GPA of at least 2.7. Failure to maintain good standing may result in dismissal from the program.

Other academic regulations and policies are established by the Graduate Liberal Studies faculty of the College of Liberal Arts and Sciences. Students should consult the M.L.S. program director for further information.

*M.L.S. students may take no more than a total of 6 credit hours of D594 and D596 combined.

Courses

LBST–D 501 Humanities Seminar (3 cr.) An interdisciplinary graduate seminar in the humanities. Topics vary from semester to semester.

LBST–D 502 Social Science Seminar (3 cr.) An interdisciplinary graduatAn interdisciplinary graduate seminar in the social sciences. Topics vary from semester to semester.e seminar in the humanities. Topics vary from semester to semester.

LBST–D 503 Science Seminar (3 cr.) An interdisciplinary graduate seminar in the sciences. Topics vary from semester to semester.

LBST–D 510 Introduction to Graduate Liberal Studies (3 cr.) A comprehensive introduction to graduate liberal studies. Explores the cultures of the humanities, social sciences, and sciences. Investigates interdisciplinary methodologies. Offers strategies for graduate-level reading, research, and writing for other publics.

LBST–D 511 M.L.S. Humanities Elective (1–4 cr.) P: D510. An M.L.S. graduate elective course in the humanities. Topics vary.

LBST–D 512 M.L.S. Social Science Elective (1–4 cr.) P: D510. An M.L.S. graduate elective course in the social sciences. Topics vary.

LBST–D 513 M.L.S. Science Elective (1–4 cr.) P: D510. An M.L.S. graduate elective course in the sciences. Topics vary.

LBST–D 514 Graduate Liberal Overseas Study (3–6 cr.) P: D510. This course will enable M.L.S. students to participate in overseas studies. In some cases there may be a language prerequisite.

LBST–D 594 Liberal Studies (1–3 cr.) P: LBST-D501, D502, and D503, and prior consent of the instructor. Directed Readings. Independent study involving systematic schedule of readings sponsored and supervised by a faculty member.

LBST–D 596 Liberal Studies Independent Research (1–3 cr.) P: D501, D502, D503 and prior consent of instructor. An independent research project formulated and conducted in consultation with a faculty member and culminating in a final analytical paper.

LBST–D 600 Public Intellectual Practicum (3 cr.) P: Completion of all M.L.S. course work. A capstone seminar for the M.L.S. public intellectual option. Students will study the history of public intellectuals, explore the variety of ways in which public intellectuals carry out their work, and create a portfolio of their own public intellectual work.

LBST–D 601 M.L.S. Project Proposal Seminar (3 cr.) P: Approval of director. A capstone seminar for the independent research/creative activity option in which students choose a topic or creative activity for their project, complete the initial research to determine its feasibility, write a formal proposal with an extensive bibliography identifying sources and/or resources necessary to complete the project, and defend it before a faculty committee.

LBST–D 602 Graduate Project (3–6 cr.) P: D601. Independent project work conducted in consultation with a faculty director.

COAS–Q 510 Topics in Information Literacy (1 cr.) Examines the research process that students must master to succeed in graduate school. Students will: gain both a practical and theoretical understanding of the organization of academic literature and the nature of information structure and organization; learn effective information retrieval methods; and apply critical thinking principles when utilizing information resources.

Southeast

Liberal Studies

Curriculum

Program Director

Professor Deborah Finkel* (Psychology)

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Departmental URL: www.ius.edu/mls

Degree Offered

The Graduate Liberal Studies program is an interdisciplinary graduate program that offers study beyond the bachelor's level for those persons who are interested in continuing their education in a diversified, challenging manner. The program offers two degree options: (1) Graduate Certificate in Liberal Studies, requiring 16 credit hours of coursework and (2) Master's Degree in Liberal Studies, requiring 34 credit hours including a thesis project. The program is not meant to prepare students for doctoral study.

Admission Requirements

For regular admission, students must have completed an undergraduate degree from an accredited institution with a grade point average of B or above. Applicants are accepted anytime, but to assure enrollment, students should apply by August 10 for the fall semester and January 2 for the spring. Applications may be obtained through the Master in Liberal Studies office at Crestview Hall 018B or by calling (812) 941-2604 or (812) 941-2668 or on the Web site.

Course Requirements

Students pursuing the master's degree are required to complete 34 credit hours of courses that have been approved for graduate credit. These courses must represent all three of the arts and sciences schools and must include 9 credits of graduate seminars D501, D502, D503, and 6 credits of graduate project (D601 & D602). Students pursuing the graduate certificate complete 16 credit hours representing at least two of the three arts and sciences schools.

Grades

Only courses in which a grade of at least a B is earned will count toward the degree.

Courses

LBST–D 501 Humanities Seminar (1–4 cr.) An interdisciplinary graduate seminar in the humanities. Topics vary from semester to semester.

LBST–D 502 Social Sciences Seminar (1–4 cr.) An interdisciplinary graduate seminar in the social sciences. Topics vary from semester to semester.

LBST–D 503 Natural Sciences Seminar (1–4 cr.) An interdisciplinary graduate seminar in the sciences. Topics vary from semester to semester.

LBST–D 510 Introduction to Graduate Liberal Studies (3–4 cr.) A comprehensive introduction to graduate liberal studies. Explores the cultures of the humanities, social sciences, and sciences. Investigates interdisciplinary methodologies. Offers strategies for graduate-level reading, research, and writing for other publics.

LBST–D 511 MLS Humanities Elective (1–3 cr.) P: Prior consent of instructor; authorization required. An MLS graduate elective course in Arts and Letters. Topics vary.

LBST–D 512 MLS Social Sciences Elective (1–3 cr.) P: Prior consent of instructor; authorization required. An MLS graduate elective course in Social Sciences. Topics vary.

LBST–D 513 MLS Science(s) Elective (1–3 cr.) P: Prior consent of instructor; authorization required. An MLS graduate elective course in Natural Sciences. Topics vary.

LBST–D 594 Liberal Studies directed Readings (1–3 cr.) P: LBST D501, D502, D503; prior consent of instructor; authorization required. Independent Study involving a systematic schedule of readings sponsored and supervised by faculty member.

LBST–D 599 Internship (0–6 cr.) An internship is an educational experience related to a student's degree program and career plan which applies what the student has learned to work situations. It involves a student, employer, and university sponsor. See Career Services for more information and to register.

LBST–D 601 Graduate Project Proposal Seminar (3 cr.) P: Approval of Director; authorization required. Independent study sponsored and supervised by faculty member/committee chair for research/creativity track in which students choose a topic, create a bibliography, write a formal proposal, and defend it before a faculty committee.

LBST–D 602 Graduate Project (1–6 cr.) P: Approval of Director; Authorization required. Independent project work conducted in consultation with a faculty director.