# College of Arts and Sciences (COAS)

#### Administrative Officers

Mark S. Hoyert, Ph.D., *Dean* Nelson H. DeLeon, Ph.D., *Associate Dean* Diane Robinson Sandidge, M.P.A., *Assistant to the Dean* 

Web site: <u>www.iun.edu/~artsci</u> Telephone: (219) 980-6730

# Faculty

For a listing of faculty by departments, see the individual Departments sections of the bulletin.

#### **Current Faculty**

#### **Department of Biology**

Spencer A. Cortwright, Ph.D., Associate Professor of Biology and Chairperson

Peter Avis, Ph.D., Assistant Professor of Biology

Carol L. Castatieda, Ph.D., Associate Professor of Biology

Kevin J. Kennedy, M.S., Lecturer in Biology

Michael S. LaPointe, Ph.D., Associate Professor of Biology, Pre-Health Professions Co-Director

Harold Olivey, Ph.D., Assistant Professor of Biology

Peggy L. Ruckman, M.S., *Lecturer in Biology* 

Richard D. Sheffer, Ph.D., Associate Professor of Biology

Department of Chemistry, Physics, and Astronomy Nelson H. DeLeon, Ph.D., Associate Professor of Chemistry, Associate Dean and Acting Chair

Alan F. Lindmark, Ph.D., Professor of Chemistry

John R. Morris, Ph.D., Professor of Physics

Julie Peller, Ph.D., Associate Professor of Chemistry Atilla Tuncay, Ph.D., Professor of Chemistry, Health Professions Director

Kizhanipuram Vinodgopal, Ph.D., Professor of Chemistry

Linda Wozniewski, M.A.T., M.B.A., Lecturer in Chemistry

#### **Department of Communication**

James H. Tolhuizen, Ph.D., Associate Professor of Communication and Chairperson

Dorothy W. K. Ige, Ph.D., Professor of Communication, Adjunct Professor of Afro-American Studies and Women's and Gender Studies

Taylor S. Lake, Ph.D., Assistant Professor of Communication and Adjunct Assistant Professor of Women's and Gender Studies

Clifford T. Long, M.A., Lecturer in Communication

Lori L. Montalbano, Ph.D., Associate Professor of Communication, Adjunct Associate Professor of Women's and Gender Studies, and Chairperson of Performing Arts

Alicia Wright, M.A., Lecturer in Communication

#### **Department of Computer Information Systems**

William Dorin, Ph.D., Professor of Computer Information Systems and Chairperson

Olatunde Abiona, Ph.D., Assistant Professor of Computer Information Systems

Vidya Arshanapalli, M.A., Senior Lecturer in Computer Information Systems

Diane Larson, M.S., Senior Lecturer in Computer Information Systems

Jie Wang, Ph.D., Assistant Professor of Computer Information Systems

#### **Department of English**

George R. Bodmer, Ph.D., Professor of English and Chairperson

William Allegrezza, Ph.D., Lecturer in English

Ann Balay, Ph.D., Assistant Professor of English, Adjunct Assistant Professor of Women's and Gender Studies, and Co-Director of Women's and Gender Studies

Alan P. Barr, Ph.D., Professor of English and Adjunct Professor of Women's and Gender Studies

Patricia Buckler, Ph.D., Assistant Professor of English and Assistant Adjunct Professor of Women's and Gender Studies

William K. Buckley, Ph.D., Professor of English

Lou Ann Karabel, M.A., Senior Lecturer in English and Coordinator of Developmental Writing

Brian T. O'Camb, Ph.D. Assistant Professor of English

Douglas J. Swartz, Ph.D., Senior Lecturer in English and Director of the Writing Program

Department of Fine Arts David W. Klamen, M.F.A., Professor of Fine Arts and Chairperson

Neil Goodman, M.F.A., Professor of Fine Arts

Jennifer Greenburg, M.F.A., Assistant Professor of Fine Arts

Kelly E. Knaga, M.F.A., Lecturer in Fine Arts

Adrienne Kochman, Ph.D., Associate Professor of Fine Arts

Derek Walter, M.F.A., Assistant Professor of Fine Arts

#### **Department of Geosciences**

Kristin Huysken, Ph.D., Associate Professor of Geology and Chairperson

Erin P. Argyilan, Ph.D., Associate Professor of Geology

Zoran Kilibarda, Ph.D., Associate Professor of Geology

# Department of History, Philosophy, Religious Studies, and Political Science

Gianluca DiMuzio, Ph.D., Associate Professor of History and Chairperson

Nicole L. Anslover, Ph.D., Assistant Professor of History

Jonathyne Briggs, Ph.D., Assistant Professor of History

Xiaoqing D. Chen Lin, Ph.D., Associate Professor of History

Marie A. Eisenstein, Ph.D., Associate Professor of Political Science

Anja Matwijkiw, Ph.D., Associate Professor of Philosophy

Jerry Pierce, Ph.D., Assistant Professor of History

Jean V. Poulard, Ph.D., Professor of Political Science

Christopher Young, Ph.D., Assistant Professor of History

**Department of Mathematics and Actuarial Science** Henry L. Wyzinski, Ph.D., *Associate Professor of Mathematics and Chairperson* 

Jon Becker, M.S., Senior Lecturer in Mathematics and Interim Executive Director of Retnetion Initiatives

Iztok Hozo, Ph.D., *Professor of Mathematics and* Associate Chairperson

Vesna Kilibarda, Ph.D., *Associate Professor of Mathematics* 

William Odefey, M.A., *Lecturer in Mathematics and Co-Director of Developmental Mathematics* 

Stela Pudar-Hozo, M.A. Equivalency, Senior Lecturer in Mathematics and Co-Director of Developmental Mathematics

Axel Schulze-Halberg, Ph.D., Assistant Professor of Mathematics

Xiao Feng Wang, Ph.D., Assistant Professor of Mathematics

#### **Department of Minority Studies**

Raoul Contreras, Ph.D., Associate Professor of Latino Studies and Chairperson of Minority Studies

Earl R. Jones, Ph.D., Associate Professor of Afro-American Studies and Associate Professor of Public and Environmental Affairs

Regina V. Jones, Ph.D., Assistant Professor of MinorityStudies and Adjunct Assistant Professor of English

# Department of Modern Languages, Comparative Literature, and Linguistics

Adrian M. Garcia, Ph.D., Associate Professor of Spanish and Adjunct Associate Professor of Women's and Gender Studies and Chairperson

Eva Mendieta, Ph.D., *Professor of Spanish and Adjunct Professor of Women's and Gender Studies* 

Ana Osan, Ph.D., Associate Professor of Spanish and Adjunct Associate Professor of Women's and Gender Studies and Director of Women's and Gender Studies

Scooter Pegram, Ph.D., Associate Professor of French and Adjunct Associate Professor of Minority Studies and Women's and Gender Studies

#### **Department of Performing Arts**

Lori L. Montalbano, Ph.D., Associate Professor of Communication and Chairperson

Katherine Arfken, M.F.A., Assistant Professor of Theatre

Timothy J. O'Donnell, M.F.A. *Production Manager and Technical Director* 

Jerry R. Taylor, M.A., Associate Professor of Theatre

#### **Department of Psychology**

Mary Ann Fischer, Ph.D., Associate Professor of Psychology and Chairperson

Frances K. Daniel, Ph.D., Assistant Professor of Psychology

Mark Hoyert, Ph.D., Professor of Psychology and Dean of the College of Arts and Sciences

Karl Nelson, Ph.D., Associate Professor of Psychology

Cynthia D. O'Dell, Ph.D., Professor of *Psychology and Women's and Gender Studies and Associate Executive Vice Chancellor of Academic Affairs* 

Stephanie H. Smith, Ph.D., Professor of Psychology

#### **Department of Sociology and Anthropology**

Charles P. Gallmeier, Ph.D., *Professor of Sociology and Chairperson* 

Jack M. Bloom, Ph.D., Associate Professor of Sociology and Adjunct Associate Professor of Minority Studies and History

Tanice G. Foltz, Ph.D., Associate Professor of Sociology and Adjunct Associate Professor of Women's and Gender Studies

Kevin McElmurry, Ph.D., Assistant Professor of Sociology

Robert J. Mucci, Ph.D., Associate Professor of Anthropology and Director of Master of Liberal Studies

Stephanie L. Shanks-Meile, Ph.D., Professor of Sociology and Adjunct Professor of Women's and Gender Studies

Michelle D. Stokely, Ph.D., Assistant Professor of Anthropology

#### Women's and Gender Studies Program

Ana Osan, Ph.D., Associate Professor of Spanish, Adjunct Assiciate Professor of Women's and Gender Studies, and Director of Women's and Gender Studies

Ann Balay, Ph.D., Assistant Professor of English, Adjunct Assistant Professor of Women's and Gender Studies, and Co-Director of Women's and Gender Studies

Cynthia D. O'Dell, Ph.D., *Professor of Psychology and Women's and Gender Studies and Associate Executive Vice Chancellor of Academic Affairs* 

# **Overview**

#### Mission

At the center of IU Northwest is the College of Arts and Sciences. Providing a broad education in the arts and sciences, the college prepares students through study in major disciplines for careers of their choice and for lives as educated, critical, and inquiring citizens in a world of rapid change.

At the core of our many programs, many unique to the region, are the analytical, cognitive, and expressive skills

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needed to assimilate and advance knowledge. An arts and sciences education focuses on an understanding of the human condition—past and present—and the world in which we live. It emphasizes a humanistic and aesthetic appreciation of cultural life as well as valuing of science and its methodology in which intellect, logical processes, ethical perspectives, and problem solving are vital. The strong research and creative activities of our faculty encourage students toward a life of learning and reflection.

Intrinsic to a liberal education is preparing graduates to appreciate, contribute to, and thrive in a diverse, culturally rich, technologically, and scientifically advanced society with a compelling history, a promising future, and a capacity for transformation. Through our teaching, research, creative arts, and professional and community services, we engage in the vitality of Northwest Indiana. An informed, educated population is not only democracy's strongest, best hope, it is also society's wisest investment. That, more than anything else, is the endeavor of the faculty and staff of the College of Arts and Sciences.

At present, the college consists of 14 departments offering baccalaureate degrees in the following areas: actuarial science, Afro-American studies, anthropology, biology, chemistry, computer information systems, economics, English, fine arts, French, geology, history, mathematics, communication, philosophy, political science, psychology, sociology, Spanish, and theatre. Courses are offered in all those fields plus astronomy, Canadian studies, comparative literature, computer science, geography, German, journalism, Latino studies, linguistics, music, physics, religious studies, telecommunications, and Women's and Gender Studies.

In addition to undergraduate education leading to the bachelor's degree, which prepares students for citizenship as well as for professional training and graduate study, the programs of the College of Arts and Sciences provide students in allied health sciences, business, continuing studies, dental auxiliary education, education, nursing, and public and environmental affairs with courses that are a foundation for those professional programs.

Postbaccalaureate certificates are offered in Computer Information Systems, Community Development and Urban Studies, Race-Ethnic Studies, and Drug and Alcohol Counseling to students who already hold a baccalaureate degree. The college offers a Master of Liberal Studies degree for students who hold a bachelors degree and wish to pursue a broad interdisciplinary program of study and a Master of Science in Clinical Counseling with a specialization in drug and alcohol counseling for students who are preparing themselves for a career in addictions treatment.

# **Contact Information**

College of Arts and Sciences IU Northwest Hawthorn Hall, Room 225 3400 Broadway Gary, Indiana 46408 (219) 980-6730

<u>Contact the College of Arts and Sciences</u> for additional contact information.

#### Accreditation

The undergraduate and graduate degree offerings of the College of Arts and Sciences are accredited by the Higher Learning Commission as an Academic Quality Improvement Program and as a member of the North Central Association.

# Policies & Procedures

Students in the College of Arts and Sciences are encouraged to familiarize themselves with "General Academic Regulations and Policies". See IU Northwest Bulletin Policies and Procedures

# **Distinctions & Opportunities**

# **Scholastic Honor Society**

*Omicron Sigma Delta* is a liberal arts scholastic honorary society based on the same criteria as those used by the prestigious national honorary scholastic society, Phi Beta Kappa. Candidates are selected from the college's juniors and seniors on the basis of high scholarship and good character.

# **Graduation with Distinction**

Recognition for excellence in scholarship is awarded at graduation by identifying such students in three categories of distinction. These are, with their corresponding minimum overall grade point averages:

- Distinction (3.60)
- High distinction (3.75)
- Highest distinction (3.89)

The number of students so recognized will not exceed 10 percent of the graduating class in the college for that year. Students considered for this recognition must have completed at least 60 graded credit hours at Indiana University.

# **Career Information**

Each department has a faculty member assigned to advise students about graduate school and career opportunities. Information regarding preprofessional programs is available on pp. 43-45 of the bulletin. Additional information is available in the office of the College of Arts and Sciences.

# Undergraduate

#### Administrative Officers

Mark S. Hoyert, Ph.D., *Dean* Nelson H. De Leon, Ph.D., *Associate Dean* Diane Robinson Sandidge, MPA, *Assistant to the Dean* 

Website: www.iun.edu/~artsci/ Phone: (219) 980-6789

# Admission

# Entering the College of Arts and Sciences

Incoming freshmen generally are admitted directly to the College of Arts and Sciences. Freshmen are encouraged to visit departments in which they are interested to discuss possible programs with faculty and advisors. Additional information is available in the College of Arts and Sciences offices, Hawthorn Hall, Room 225.

# **General Requirements**

The following requirements pertain to IU Northwest only. Students contemplating transfer to other campuses should consult the appropriate bulletins and the IU Care electronic advising system.

#### **Baccalaureate Degrees**

A faculty member from the student's major department provides academic counseling for each student in the College of Arts and Sciences prior to each semester's enrollment. Although academic counseling is intended to provide effective guidance and every student is encouraged to seek the counsel of a faculty advisor, *all students are responsible for planning their own programs and for meeting the following degree requirements by the time they expect to graduate. Students who have been awarded a baccalaureate degree cannot at a later date change the degree to include additional majors and/or minors. (Note:* Degree requirements are not the same at every campus of Indiana University.)

- Minimum of 120 credit hours. At least 105 credit hours must be in courses in the College of Arts and Sciences unless a student pursues a minor or a certificate in another division of the university that grants degrees. If so, the 105 credit hour minimum in Arts and Sciences may be reduced sufficiently to allow the student to fulfill the minimum number of credit hours for the other division's minor or certificate, providing that all other Arts and Sciences requirements are met. If no such non—Arts and Sciences minor or certificate is pursued, the remaining 15 credit hours may be taken in the College of Arts and Sciences or in divisions of the university that grant degrees. Only courses that count toward a degree are acceptable.
- Minimum cumulative grade point average of 2.0.
- Minimum of 36 credit hours in courses at the 300-400 (junior-senior) level.
- Minimum of 25 credit hours with grades of C- or higher in the major field and a cumulative grade point average of at least 2.0 in the major field.
- Minimum of 15 credit hours with grades of C- or higher in the minor field and a cumulative grade point average of at least 2.0 in the minor field.
- Maximum of 45 credit hours in one subject that may be counted toward the B.A. and B.S. degree.
- Twenty-six (26) credit hours of the work of the senior year must be completed while in residence at the IU Northwest campus. At least 10 credit hours of course work in the major field must be completed on the IU Northwest campus.
- Work for credit in the College of Arts and Sciences may be done at Bloomington or other Indiana University campuses.
- Not more than 60 credit hours earned in accredited two-year institutions of higher education, nor more than 90 credit hours from accredited four-year institutions of higher education, may be applied toward a degree.
- By special permission of the dean, up to 6 credit hours toward a degree may be earned through

correspondence study through the IU School of Continuing Studies. Ordinarily, students in residence in the college are not permitted to enroll in correspondence courses that are currently offered by the college.

- A student who fails to complete a degree within 10 years of matriculation will forfeit the automatic right to use the requirements in effect at the time of matriculation. In such cases, the dean, in consultation with the student's major department chair, will determine which set of requirements, or what particular combination of old and new requirements, will be appropriate for the student.
- All credit of candidates for degrees, except that of the current semester, must be on record at least six weeks prior to the conferring of degrees.
- An application for a degree must be filed in the Office of the College of Arts and Sciences no later than July 1 for December graduation. *May and August graduates must file the application for graduation by October* 15. Degrees are conferred in May, August, and December. Commencement is held only in May.

# **Restart Policy**

Students who have been away from Indiana University for at least five years and who earned grades that make it impossible or very difficult to return to a College of Arts and Sciences degree program may petition for a "restart." Under a restart, the College of Arts and Sciences will establish a new degree record for the student that will consist of courses previously taken that were completed with a minimum grade of C. Note that all Indiana University course work will remain on the student's permanent record (the university transcript); this policy will affect only the student's College of Arts and Sciences record.

Students will be eligible for consideration for this policy if it has been a minimum of five years since full-time or continuous part-time enrollment. Students will need to provide evidence that would indicate a significant change in their ability to succeed in academic work. Reevaluation of fundamental skills may be necessary before the student can proceed. Students should petition for a restart as part of the readmission process. They are held to the deadlines for submission of readmission petitions (June 20 for fall semester; October 1 for spring semester; and March 1 for summer sessions)

# **Bachelor of Arts**

#### **College of Arts and Sciences Bachelor of Arts Areas**

The College of Arts and Sciences at IU Northwest offers instruction leading to degrees in the following majors:

- Afro-American Studies
- Anthropology
- Biology
- Chemistry
- Communication
- Economics
- English
- Fine Arts
- French
- Geology

- History
- Mathematics
- Philosophy
- Political Science
- Psychology
- Sociology
- Spanish
- Theatre

Courses are offered in the following disciplines, some of which have programs that can lead to minors:

- Astronomy
- Canadian Studies
- Comparative Literature
- Computer Science
- Geography
- German
- Journalism
- Latino Studies
- Linguistics
- Music
- Physics
- Religious Studies
- Telecommunications
- Women's and Gender Studies

The curriculum for the B.A. degree introduces the student to a variety of subjects that provide the fundamentals of a liberal education; enable the student to make an intelligent choice of a subsequent field of concentration; aid the student in securing adequate preparation for advanced work; and provide for some degree of specialization in the junior and senior years.

#### **Specific Requirements**

In addition to the general requirements for all degrees in the college, candidates for the B.A. degree must complete Groups I-V of the distribution requirements. Students may elect to follow the requirements currently in effect or the requirements that were in effect when they matriculated.

- Group I: Foundation for Effective Learning
- Group II: Foreign Language
- Group III: Distribution
- Group III Courses
- Group IV: Diversity
- Group IV Courses
- Group V: Requirements for the Major
- B.A. Degree Requirements Table (See Appendix)

# Group I: Foundation Courses

#### **English Composition**

Every student must demonstrate the ability to use correct, clear, effective English. The student may satisfy this requirement in either of the following ways:

• By being exempted with or without credit. Students who wish to be considered for exemption must take the SAT Verbal Examination. A score of 660 or higher on the SAT Writing Examination, or 30 or higher on the combined English/Writing portion of the ACT, will be sufficient for exemption. For exemption with credit, students must take both the SAT Writing Examination and the English Composition Achievement Test and receive scores of 600 or higher on both exams; 3 credit hours of ENG W141 will be granted.

• By completing ENG W131 Elementary Composition I (3 cr.), with a grade of C (2.0) or higher

#### **Mathematics**

May be fulfilled in one of the following ways:

- By earning minimum test scores of 650 on the SAT exam or 29 on the ACT exam.
- By completing, with a grade of C (2.0) or higher, one of the following courses: MATH M100, MATH M110, MATH M118, MATH M119, MATH M125, or MATH M215.
- By exemption (without credit) through an appropriate examination as determined by the Department of Mathematics.

#### **Intensive Writing**

Two intensive writing courses must be completed *after* completing the ENG W131 requirement:

- By completing one or two intensive writing course at the 200 level or above in the English department, or
- By completing one or two "Intensive Writing Course" in any arts and sciences department. If so designated, the course may also be counted toward fulfilling other arts and sciences degree requirements (e.g., distribution, major, 300-400 level).

An intensive writing course is one in which the writing component is fully integrated with the content and objectives of the course. Thus, a student would not be able to pass the course without fulfilling the intensive writing component and, conversely, it would be equally impossible for a student to pass the intensive writing component and not receive a passing grade in the course.

#### **Oral Communication**

Every student must demonstrate the ability to deliver presentations with logical organization, proper grammar, appropriate word choices, coherent sentence structure, and that take the characteristics of the audience into account. Students may satisfy this requirement by completing SPCH S121 Public Speaking with a grade of C (2.0) or higher.

## **Group II: Foreign Language**

The College of Arts and Sciences entrance requirement is two courses at the 100 level in a foreign language. Students admitted to arts and sciences without this background will be required to make up the deficiency. The requirement may be met by examination or by successful completion of the course taken. (Two years of good high school work in a foreign language should enable a student to place out of the first 8 credit hours and into 200-level courses.) Preferably, placement is determined by the score obtained on the College Board Achievement Test administered during the student's senior year in high school.

The B.A. degree requirement of foreign language may be fulfilled in the following ways:

 By completing satisfactorily 6 credit hours of course work or the equivalent at the 200 level in a foreign language or by completing 3 credit hours of course work or the equivalent at the 200 level and two semesters of culture courses taught in English from the same language base. These culture courses may be taken at any point during the student's program of study of a foreign language.

 By attaining, at any time, an achievement test score sufficient for placement in courses at the firstsemester third-year level in a foreign language.

#### **Special Credit as a Result of Placement Test**

A student who places at the third-year level on the language placement test and receives a grade of C or higher in the validating third-year-level course will be eligible to receive 6 hours of special credit with a grade of S. A student who places in the second semester of the second year and completes the validating course with a grade of C or higher will be eligible to receive 3 hours of special credit with a grade of S. It will be the responsibility of the student to request that the language department forward this information to the College of Arts and Sciences.

#### **Proficiency Examinations**

A student may complete the language requirement by taking a proficiency examination administered by the department concerned. Students with a background in a language other than those taught at IU Northwest may take an examination from the relevant department at IU Bloomington. Such examinations will be given after the student has petitioned the IU Bloomington department and received the consent of the department. See the section of this bulletin entitled "Credit by Examination" under "Academic Regulations and Policies" for details

#### **Foreign Students**

Students whose native language is not English may substitute demonstrated proficiency in their native language if it is offered for instruction at Indiana University. They may not, however, earn credit for any courses at the first- or second-year level in their native language.

# **Group III: Distribution**

Students must take 12 credit hours outside of their major discipline in each of the three categories from at least two disciplines within each category. No more than 9 credit hours within a single discipline will be counted for Group III credit.

A complete list of courses that fulfill these requirements is located in the Arts and Sciences section of the bulletin.

A student must take at least one science course in Group III A that includes a laboratory.

MATH M014 does not count for credit at IU Northwest in the College of Arts and Sciences, the School of Education, or the School of Business and Economics.

A student must take at least one studio arts/perform-ing arts/creative writing course in the humanities.

#### Mathematics, physical sciences, and life sciences

Anthropology Astronomy Biology Chemistry Computer information systems Geology Mathematics Physics Psychology

#### Social and behavioral sciences

Afro-American studies Anthropology Economics Geography History Latino studies Linguistics Political science Psychology Sociology Spanish Speech Telecommunications Women's and Gender Studies

#### **Humanities**

Afro-American studies Anthropology Canadian studies Comparative literature English Fine arts French History Latino studies Music Philosophy Religious studies Sociology Spanish Speech Theatre Women's and Gender Studies

## **Group IV: Diversity**

Students must take one 3 credit hour course in each of these three categories. No course can be used more than once in Group IV. Courses used to fulfill the Group IV requirements cannot also be used to fulfill the Group III requirements; if a course taken in Group IV is in the discipline of the student's primary major, it cannot also be counted in that major itself.

- Select one History course from the following
  - HIST H105
  - HIST H106
  - HIST H113
  - HIST H114
  - HIST H232
- Racial Minority Experience in the United States
  - Students must complete one course from the list of Group IV B courses.
- Additional Diversities (social class, language, religion, gender, sexual orientation, age, disabilities, non-western culture)
  - Students must complete one course from the list of Group IV C courses.

## **Group V: Requirements for the Major**

No later than the first semester of the junior year, students should plan a tentative outline of the program in their major with their advisors in the department of their major.

The following are minimum requirements for any major. Further and detailed requirements are to be found in the departmental statements in this bulletin. The specific departmental requirements that must be fulfilled by each student are those published in the bulletin current at the time the major is declared, or those in the bulletin current at the time of graduation, whichever the student chooses.

- At least 25 credit hours must be taken in the major, and the cumulative grade point average in the major must be at least 2.0.
- Any course in which the student receives a grade below C— may not be used to fulfill requirements for the major. However, any course that the student passes will count toward the 120 credit hour total.
- Individual departments may require a minor of 15 to 20 credit hours in another subject. Any course taken to satisfy the requirements of a minor must be completed with a grade of C— or higher; and the cumulative grade point average of all courses taken in the minor must be at least 2.0 (C). At least 6 credit hours of courses in the minor must be taken in residence at IU Northwest. (See the individual departmental listings.)
- Not more than 45 credit hours in any *one subject* may be counted toward the B.A. degree.

Students must take 3 credit hours of capstone course work. The course may also be counted toward fulfilling other arts and sciences degree requirements (e.g., distribution, major, 300-400 level). Consult departmental advisors for details.

For procedure regarding change of major, see the assistant to the dean.

# **Minors (Optional)**

A minor shall consist of at least 15 credit hours with a grade of C— or higher and a cumulative grade point average of at least 2.0 in the minor field. (A minimum of 2 courses totaling at least 6 credit hours must be taken while in residence at IU Northwest.)

Students in one department (e.g., history) may satisfy requirements for a minor in another department (e.g., anthropology). Students may have more than one minor. Students' major(s) and minor(s) may be listed on their transcripts. Students must advise the recorder in the College of Arts and Sciences of the minor(s) and receive advisement from the minor department.

# Students who have been awarded a baccalaureate degree cannot at a later date change the degree to include additional majors and/or minors.

The Department of Communication requires a minor; students in communication should check with their advisor about the requirements for a minor.

The following minors are available in the College of Arts and Sciences:

Afro-American Studies

- Anthropology
- Biology
- Canadian Studies
- Chemistry
- Communication
- Computer Information Systems
- Economics
- English
- Fine Arts
- French
- Geology
- History
- Latino Studies
- Mathematics
- · Philosophy
- Physics
- Political Science
- Psychology
- Race-Ethnic Studies
- Sociology
- Spanish
- Theatre
- Women's and Gender Studies

### Degree Completion Chart for Bachelor of Arts

\* Must include one science course in Group IIIA that includes a laboratory

\*\* Must include one studio art/performing arts/creative writing cruse in Group IIIC that includes a laboratory.

# **Bachelor of Science**

# College of Arts and Sciences Bachelor of Science Areas

The College of Arts and Sciences at IU Northwest offers instruction leading to Bachelor of Science degrees in the following majors:

- Actuarial science
- Biology
- Chemistry
- Computer information systems
- Environmental Science (Interdepartmental Biology, Chemistry, and Geosciences)
- Geology
- Informatics
- Mathematics
- Psychology

#### **Specific Requirements**

In addition to the general requirements for baccalaureate degrees of the college, candidates for the B.S. degree must complete the group requirements as follows:

- Group I: Foundation for Effective Learning
- Group II: Intensive Writing
- Group III: Distribution
- Group IV: Diversity
- · Group V: Major
- B.S. Degree Requirement Table (See Appendix)

# Group I: Foundation for Effective Learning

#### **English Composition**

Students must demonstrate the ability to use correct, clear, effective English. The student may satisfy this requirement in either of the following ways:

- By being exempted students who wish to be considered for exemption must take the SAT or the ACT. A score of 660 or higher on the SAT Critical Reading Examination or a score of at least a 30 on the combined English/Writing portion of the ACT will be sufficient for exemption.
- By completing ENG-W 131 Elementary Composition I (3 cr.), with a grade of C (2.0) or higher.

#### **Oral Communication**

Every student must demonstrate the ability to deliver presentations with logical organization, proper grammar, appropriate word choices, coherent sentence structure, and that take the characteristics of the audience into account. Students may satisfy this requirement by completing

• SPCH-S 121 Public Speaking with a grade of C (2.0) or higher.

#### **Mathematics**

Every student must demonstrate mathematical reasoning. Students may satisfy this requirement in either of the following ways:

- By earning a minimum test score of 650 on the SAT Mathematics examination or a 29 on the ACT Mathematics examination.
- By completing, with a grade of C (2.0) or higher, one of the following courses: MATH-M 100, MATH-M 118, MATH-M 119, MATH-M 125, MATH-M 215. This course can also be used to satisfy requirements within the major. For example, the Mathematics and Chemistry majors require MATH-M 215.
- By exemption (without credit) through an appropriate examination as determined by the Department of Mathematics.

# **Group II: Intensive Writing**

Students must complete at least two COAS Intensive Writing courses. (These courses can also be used to satisfy other distribution requirements or requirements within the major.)

## **Group III: Distribution**

Requirements for science courses are determined by the department of the student's major. One course must be a science course with a lab that is outside the student's major. A student must take a total of 18 credit hours listed under the categories of Group IIIB and IIIC with a minimum of 6 credit hours in each category. These courses must be outside of the discipline of the student's major. (A complete list of courses that fulfill these requirements is located under the College of Arts and Sciences B.A. requirements in this bulletin).

## **Group IV: Diversity**

Students must take one 3 credit hour course in Racial Minority Experience in the United States. (Any one course

from the list of Group IVB courses.) The course used to fulfill the Group IV requirements can also be used to fulfill the Group III requirements; if a course taken in Group IV is in the discipline of the student's primary major, it cannot also be counted in that major itself. (A complete list of the courses that fulfill this requirements can be found in the College of Arts and Sciences B.A. section of this bulletin.)

## **Group V: Major**

May be fulfilled by completing satisfactorily the departmental requirements for the major.

Students must take 3 credit hours of capstone course work: either in the student's major or in one of the Group III categories in one of the Group III interdisciplinary capstone courses. The course may also be counted toward fulfilling other arts and sciences degree requirements (e.g., distribution, major, 300-400 level). Consult departmental advisors for details. (See Bachelor of Arts requirements for listing of available minors.)

# Certificates

The College of Arts and Sciences offers undergraduate and post-baccalaurate certificates in the following areas:

- Computer Information Systems
- Drug and Alcohol Counseling
- Community Development/Urban Studies
- Race-Ethnic Studies
- Women's and Gender Studies

# **Second Bachelor's Degree**

Normally the holder of a baccalaureate degree who wishes to pursue a further educational goal is encouraged to become qualified for admission to a graduate degree program. In certain cases, however, the dean may admit a baccalaureate degree holder to candidacy for a second baccalaureate degree. When such admission is granted, candidates must earn at least 26 additional credits-in-residence and meet the requirements of the College of Arts and Sciences and of the department in which they are candidates.

### **Interdepartmental Major**

Interdepartmental majors are available to students who wish to combine two disciplines or subjects into an interdepartmental concentration area. Such students are required to complete a minimum of 40 credit hours in the interdepartmental major. Students must also fulfill the following requirements:

- The 40 credit hour concentration need not be equally divided between the two disciplines, but a program designed to give substantial knowledge should be planned in each discipline.
- Each of the two areas should include a minimum of four 300- or 400-level courses for a minimum of 12 credit hours in each area.
- Students must have two advisors, one from each department in which they propose to study.
- The program of studies must be approved by both departments and by the college.

The following interdepartmental majors are available in the College of Arts and Sciences:

- Afro-American Studies and Communication
- · Afro-American Studies and English
- Computer Information Systems and Fine Arts
- Computer Information Systems and Mathematics
- Biology, Chemistry and Geosciences -Environmental Sciences

# **Preprofessional Curricula**

The Pre-Health Professions Program is home to students who wish to pursue medicine, dentistry, veterinary, pharmacy, nursing, physical therapy, occupational therapy, optometry, physician assistant, podiatry, chiropractic therapy, speech and hearing therapy as well as other health professions as careers. To gain admission into those professions, students typically complete a bachelor's degree followed by considerable advanced study. At the undergraduate level, students may select and complete any major. However, students need to enroll in a specified sequence of courses to prepare them for professional school entrance examinations and to satisfy professional school prerequisite requirements. The particular sequence of courses is unique to each professional school. The Pre-Health Professions Program provides students with comprehensive advice and guidance from the time they first express an interest in a health profession (even before they matriculate at IU Northwest) through graduation and successful transition into a professional school). The program helps ensure that the students' education is of the highest guality, and helps them identify the medical and health careers that fit their aspirations, helps them develop a tailored sequence of courses that will help them reach their goals, and helps them prepare applications that present them at their best.

# Dentistry

Students may be admitted to the School of Dentistry upon receipt of their baccalaureate degrees or at the end of three years in the College of Arts and Sciences.

A student entering the School of Dentistry after completing 90 credit hours in the College of Arts and Sciences, exclusive of military training and physical education, who has satisfied the Group I through V requirements, may apply 32 credit hours earned the first year in dentistry as electives and at the end of this year earn the B.A. degree. Students expecting to do this should consult with their major departments since IU Northwest awards the B.A. degree.

#### **Predental Requirements**

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- CHEM-C 105/C125 (5 cr.)
- CHEM-C 106/C126 (5 cr.)
- CHEM-C 341 (3 cr.)
- CHEM-C 343 (3 cr.)
- ENG-W 131 (3 cr.)
- Select one of the following
  - PHYS-P 201 P202 (10 cr.)
  - PHYS-P 221 P222 (10 cr.)
- Psychology (3-4 cr.)
- Interpersonal communication (3 cr.)
- Biochemistry (3 cr.)

- Anatomy with a laboratory (4 cr.)
- Physiology with a laboratory (4 cr.)

For further information regarding programs, the Dental Aptitude Test, and applications, contact the health professions advisor at (219) 980-6745.

#### Law

Admission to law schools requires a baccalaureate degree and a Law School Admission Test (LSAT) score. The degree may be in any discipline. Students preparing for law school are advised to take courses in logical thought, American history, American politics, business, and criminal and civil law. While no specific courses are required, Indiana University offers an interdisciplinary prelaw minor for students interested in attending law school.

The minor includes six courses totaling 18 credit hours. Students in the School of Public and Environmental Affairs, the School of Business and Economics, and the College of Arts and Sciences could double-count courses that are required for their major or concen-tration, but they are required to take at least four courses or 12 credit hours outside of their major or concentration. The structure of the minor is as follows:

- HIST-H 106 American History II (Twentieth Century) (3 cr.)
- PHIL-P 150 Elementary Logic (3 cr.)
- BUS-L 201 Legal Environment of Business (3 cr.)
- SPEA-J 101 American Criminal Justice (3 cr.)
- POLS-Y 103 Introduction to American Politics (3 cr.)
- One elective (3 cr.)

Students may pick from the following courses for the elective:

- ECON-E 103 Introduction to Microeconomics (3 cr.)
- HIST-H 105 American History I (3 cr.)
- SPEA-J 301 Substantive Criminal Law (3 cr.)
- SPEA-J 303 Evidence (3 cr.)
- SPEA-J 306 The Criminal Courts (3 cr.)
- BUS-L 303 Commercial Law (3 cr.)
- BUS-A 201 Introduction to Financial Accounting (3 cr.)
- HIST-A 313 Origins of Modern America (3 cr.)
- HIST-A 315 Recent U.S. History (3 cr.)
- SPEA-H 441 Legal Aspects of Health Care Administration (3 cr.)

The prelaw advisor can approve an elective that is not on this list if it meets the educational objectives.

The university provides prelaw counseling for interested students. Contact the prelaw advisor at (219) 980-6841 or (219) 980-6636.

## **Medicine**

A student may be admitted to the School of Medicine upon receipt of the baccalaureate degree with a major in any department in the College of Arts and Sciences provided courses required by the School of Medicine are included.

#### **Premedical Requirements**

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)

- CHEM-C 105 (3 cr.)
- CHEM-C 125 (2 cr.)
- CHEM-C 106 (3 cr.)
- CHEM-C 126 (2 cr.)
- CHEM-C 341 (3 cr.)
- CHEM-C 342 (3 cr.)
- CHEM-C 343 (2 cr.)
- CHEM-C 344 (2 cr.)
- Select one of the following
- PHYS-P 201 P202 (10 cr.)
  - PHYS-P 221 P222 (10 cr.)

For additional information about the Medical College Admission Test, the American Medical College Application Service, programs, and application procedures, contact the Health Professions Advisor at (219) 980-6745.

# **Occupational Therapy**

Indiana University offers a six-year program leading to a master's degree in occupational therapy (four years preoccupational therapy leading to a bachelor's degree with a major in any department in the College of Arts and Sciences, two years in the master's program offered by Indiana University on the IUPUI campus). IU Northwest offers the courses required for entry into master's programs in occupational therapy. Upon completion of the bachelor's degree, students must apply for entry to a school of occupational therapy for their professional training. Admission to an occupational therapy program also requires documented volunteer or paid experiences in health care settings.

#### **Preoccupational Therapy Requirements**

- CHEM-C 101 (3 cr.)
- CHEM-C 121 or higher (2 cr.)
- Anatomy with a laboratory (4 cr.)
- Physiology with a laboratory (4 cr.)
- Composition (6 cr.)
- Speech (3 cr.)
- Basic statistics (3 cr.)
- MATH-M 118 or higher
- Ethics or philosophy (3 cr.)
- Introductory sociology (3 cr.)
- Introductory psychology (6 cr.)
- Abnormal psychology (3 cr.)
- Life span psychology (3 cr.)
- Medical terminology (3 cr.)
- Electives (12-13 cr.)

This plan of study will satisfy most of the requirements of other institutions. Applicants seeking admission to an occupational therapy program should contact the school they are interested in attending for up-to-date information on specific prerequisites and admission requirements.

For further information contact the health professions advisor at (219) 980-6745.

## Optometry

Indiana University offers a seven-year program leading to a degree in optometry (three years preoptometry, four years in the School of Optometry). During the three-year preoptometry program, the student must complete 90 credit hours, including the following:

- CHEM-C 105 (3 cr.)
- CHEM-C 106 (3 cr.)
- CHEM-C 125 (2 cr.)
- CHEM-C 126 (2 cr.)
- CHEM-C 341 (4 cr. or two courses)
- MATH-M 215 (5 cr.)
- PHYS-P 201 (5 cr.)
- PHYS-P 202 (5 cr.)
- PSY-P 101 (3 cr.)
- PSY-P 102 (3 cr.)
- PSY-K 300 (3 cr.)
- BIOL-L 101 (4 cr.)
- BIOL-M 310 (3-4 cr.)
- plus one additional advanced course in biology
- ENG-W 131 (3 cr.)
- Arts and humanities (6 cr.)
- Social and behavioral sciences (6 cr.)
- Proficiency equivalent of foreign language (10 cr.)

The student may submit an application to the School of Optometry one semester in advance of completion of preoptometry requirements.

For applications and additional information contact the health professions advisor at (219) 980-6745.

# Pharmacy

IU Northwest does not grant a degree in pharmacy, but students may complete prepharmacy courses on this campus. The following plan of study is for students who will apply for admission to the School of Pharmacy and Pharmacal Sciences at Purdue University, West Lafayette campus. (The information is subject to change as a result of action by federal and/ or state governments, the Trustees of Purdue University, the administration of Purdue University, and the faculty of the School of Pharmacy and Pharmacal Sciences.)

The application for admission should be submitted to Purdue University before January 5 to ensure consideration for the fall semester. Students who decide to transfer to another institution may have to adjust their program.

#### Prepharmacy

- One year of general chemistry with laboratory (minimum 8 cr.)
- One year of organic chemistry with laboratory (minimum of 8 cr.)
- One year of calculus (minimum of 6 cr.)
- One semester of economics (3 cr.)
- One year of biology with laboratory (minimum of 8 cr.)
- One semester of microbiology with laboratory (minimum of 4 cr.)
- One year of anatomy and physiology (8 cr.)
- One semester of physics (5 cr.)
- Two semesters of English composition (minimum of 6 cr.)

Students who complete prepharmacy at IU Northwest can apply for admission to the School of Pharmacy at Purdue and should schedule PHPR200 (Pharmacy Orientation) after transferring. High school and college records will be considered in determining eligibility for admission. A student should also have at least a B+ average for all courses previously taken. In addition, the grade in each course must be at least a C for the credit to transfer. Grades are not transferred; only credit in the course is recorded. Purdue University does not automatically accept advanced credit that is granted by other universities. A similar program is now in place with the Chicago College of Pharmacy and its 2+3 program.

For further information on the health professions and pharmacy contact the health professions advisor at (219) 980-6745.

## **Physical Therapy**

Indiana University offers a seven-year program leading to a degree in physical therapy (four years prephysical therapy leading to a bachelor's degree with a major in any department in the College of Arts and Sciences, three years in the doctoral physical therapy program offered by Indiana University on the IUPUI campus). IU Northwest offers the courses required for entry into master's and doctoral programs in physical therapy. Upon completion of the bachelor's degree, students must apply for entry to a school of physical therapy program also requires documented volunteer or paid experiences in health care settings.

#### **Prephysical Therapy Requirements**

- CHEM-C 105 (3 cr.)
- CHEM-C 125 (2 cr.)
- CHEM-C 106 (3 cr.)
- CHEM-C 126 (2 cr.)
- Select one of the following
  - PHYS-P 201 P202 (10 cr.)
  - PHYS-P 221 P222 (10 cr.)
- Anatomy with a laboratory (4 cr.)
- Physiology with a laboratory (4 cr.)
- Basic statistics (3 cr.)
- Introductory psychology (3 cr.)
- Life span Human Development / Psychology (3 cr.)
- Social science or humanities electives (6 cr.)

This plan of study will satisfy most of the requirements of other institutions. Applicants seeking admission to a physical therapy program should contact the school they are interested in attending for up-to-date information on specific prerequisites and admission requirements.

For further information contact the health professions advisor at (219) 980-6745.

## **Physician Assistant**

Indiana University does not have a degree program in physician assistant studies. However, the courses needed for admission are available at IU Northwest. Admission to most programs requires a minimum of 3 years (90 credit hours) of study at an accredited college or university. Some programs that offer a master's degree in physician assistant studies also require a bachelor's degree. The course requirements vary quite a bit, although most programs require

- Two courses of general chemistry with the lab
- · One course in biology with the lab
- One course in microbiology with the lab

- Two courses in anatomy and physiology with the lab
- Two courses in organic chemistry with the lab

Admission to a physician assistant program generally requires volunteer or paid experience in a health care setting. Applicants seeking admission to a physician assistant program should contact the school they are interested in attending for up-to-date information on specific prerequisites and admission requirements.

For further information contact the health professions advisor at (219) 980-6745.

## Podiatry

Indiana University does not have a degree program in podiatry. However, the courses needed for admission are available at IU Northwest. The minimum requirement for admission to a school of podiatry is completion of three academic years (90 credit hours) of study at an accredited college or university. Applicants are strongly encouraged to obtain a baccalaureate degree before entering a college of podiatry. The undergraduate curriculum should include these courses

- Biology (8 cr.)
  - Recommendation that 4 of those credits be either cell biology or biochemistry
- Inorganic chemistry (8 cr.)
- Organic chemistry (8 cr.)
- Physics (8 cr.)
- English composition and literature (6 cr.)

Science courses must include laboratories

Further information on the health professions and podiatry may be obtained by contacting the health professions advisor at (219) 980-6745.

### Veterinary

Indiana University does not have a degree program in veterinary medicine. However, the courses needed to apply for admission to such a program are available at IU Northwest.

Candidates must complete a minimum of 70 credit hours of course work before taking the Graduate Record Exam.

#### Minimum requirements

- English composition (6 cr.)
- Speech (3 cr.)
- General biology with laboratories (8 cr.)
- General and organic chemistry with laboratories (16 cr.)
- One semester of genetics
- Two semesters of calculus
- Physics with laboratories (8 cr.)
- Genetics with laboratory (4 cr.)
- Three semesters of humanities (9 cr.)
- Electives (18 cr.)

If an animal nutrition course is not available at the undergraduate campus, a student may take this course after admission to the program.

Further information on the health professions and veterinary medicine may be obtained by contacting the health professions advisor at (219) 980-6745.

## **Courses Outside the College of Arts and Sciences**

A candidate for a baccalaureate degree in the College of Arts and Sciences must complete satisfactorily at least 105 credit hours in courses in the College of Arts and Sciences unless a student pursues a minor or a certificate in another division of the university that grants degrees. If so, the 105 credit hour minimum in Arts and Sciences may be reduced sufficiently to allow the student to fulfill the minimum number of credit hours for the other division's minor or certificate, providing that all other Arts and Sciences requirements are met. If no such non-Arts and Sciences minor or certificate is pursued, the remaining 15 credit hours may be taken in the College of Arts and Sciences or in divisions of the university that grant degrees. Only courses that count toward a degree are acceptable.

# **Courses Outside IU Northwest**

Current IU Northwest COAS students who seek to take additional courses at another college or university that are specifically required for their IU Northwest major are strongly advised to seek prior approval by their departmental chair, the chair of the department offering the course, and the dean of COAS before those courses are taken to ensure the transfer of those courses back to IU Northwest and the acceptance of those courses for their degree requirements.

Students who leave IU Northwest for a semester or longer, take courses elsewhere, and return to IU Northwest at a later date must go through the usual transfer of credit process as required for students new to IU Northwest; their department chairs and Dean have the right to deny approval of the acceptance of those courses by IU Northwest. Prior approval is advised.

(Approved by College of Arts and Sciences Curriculum Committee, February 24, 2006)

# **Double Majors and Double Degree**

Students may complete the requirements of two majors as either a double major or a double degree. With a double major, students complete the major (Group V) requirements for two majors and receive one degree. Students in this situation need only to satisfy the distribution requirements of the first major. They may use courses in the second major to satisfy the distribution requirements. With the double degree option, students complete two majors and receive two degrees. These degrees are of different type. Examples could include a student receiving a B.S. in Geology and a B.A. in English (different types of degrees) or a B.S. in Business and a B.S. in Biology (different divisions of the university), or a B.S. in Education and a B.A. in Geology (different types of degrees and different divisions of the university). A student pursuing a double degree would need to satisfy the distribution requirements for both majors.

# Departments Biology

## About the Department of Biology

Biology is the study of life. The Department of Biology at IU Northwest offers an interdisciplinary program in the life sciences leading to a Bachelor of Science degree, or a Bachelor of Arts degree. Students majoring in other subjects may also earn a Minor in Biology. Our undergraduate programs are designed to interface with the faculty's expertise in biomedical sciences, biotechnology, and environmental and ecological sciences. The programs are diverse, flexible, and designed to accommodate individuals who have a wide range of interests within the life sciences. Courses are available for students seeking preprofessional training in the medical sciences (premedical, predental, and allied health sciences), for those pursuing occupations in biotechnology, forensics, and the pharmaceutical industry, for students intending to continue with graduate studies, and for those interested in environmental issues and field work. We firmly believe that the training of an undergraduate student is enhanced by experience in the "discovery side" of the discipline. Thus, students are encouraged to participate in research with faculty mentors. Many of our faculty have adjunct appointments at the Northwest Center for Medical Education, located across campus, and also maintain collaborations at other research institutions within the greater metropolitan area. This expands the opportunities for our students to engage in research projects with a broad spectrum of life scientists within and outside of Indiana University.

Each student majoring in biology is encouraged to acquire in-depth knowledge in related scientific disciplines or in other areas of study that use biology or contribute to biological methodologies. Biology students are thus encouraged to consider obtaining a minor in another area of study. The student's advisor will help plan such a program, which may be in disciplines in the College of Arts and Sciences or in other divisions of the university.

In addition to course work structured for the biology major, the Biology Department offers an array of classes designed for students majoring in other disciplines who are interested in certain areas of the life sciences.

The Department of Biology sponsors a chapter of Beta Beta Beta, the national honorary society in biology. Moreover, many of our students belong to student run organizations with faculty advisors such as the Biology club and the Preprofessional Studies Club. These organizations foster friendships and community among students interested in the biological sciences and other sciences, and offer outside avenues for learning and gaining experience related to their formal training within the department.

# Major in Biology - B.S.

The Bachelor of Science in Biology degree provides students with a rigorous general background in the field of biology to prepare for graduate or professional school or science-related jobs requiring bachelor's-level training. The requirements in chemistry, mathematics, and physics have been selected to optimize the student's future opportunities. The degree provides a rigorous background in fundamental biology and cognate areas, and prepares students for professional or research-oriented careers and graduate work in a selected area of biology.

#### Requirements

- BIOL-L 101\* (4 cr.)
- BIOL-L 102\* (4 cr.) prequisite of BIOL-L 101
- BIOL-L 211(3 cr.) prequisite of BIOL-L 102
- BIOL-L 311 (4 cr.) prequisite of BIOL-L 211

\*BIOL-L 101 and BIOL-L 102 must be taken in sequence.

- At least 25 additional credit hours in Biology upperlevel (300-400) courses must be completed.
- Students must complete at least four additional upper level labs.
- BIOL-L 403 (Senior Seminar) must be completed during the senior year (1 cr.).

BIOL-L 473, BIOL-M 440, or BIOL-Z 466 may satisfy the capstone requirement.

A minimum of one course must be taken from the listed courses in each of the areas below

- Molecular and Cellular Biology
  - BIOL-L 312 (3 cr.)
  - BIOL-M 310 (4-5 cr.)
  - BIOL-L 321 (3 cr.)
  - BIOL-L 323 (3 cr.)
- Genetics, Development, Evolutionary Biology
  - BIOL-L 318 (3 cr.)
  - BIOL-Z 318 (3 cr.)
  - BIOL-L 331 (3 cr.)
  - BIOL-Z 466 (3 cr.)
- Ecology, Physiology, and Organismal Biology
  - BIOL-B 351 (3 cr.)
  - BIOL-B 352 (2 cr.)
  - BIOL-Z 406 (3 cr.)
  - BIOL-L 473 (3-4 cr.)
  - Select one of the following
    - BIOL-P 416 (3 cr.)
      - BIOL-P 461 (4 cr.)

Students should consult with the Biology faculty for additional information concerning prerequisites and course content.

In addition to the required biology courses, the student must complete

- The following are required and should be taken concurrently with BIOL-L 101 and BIOL-L 102
  - CHEM-C 105 (3 cr.)
  - CHEM-C 106 (3 cr.)
  - CHEM-C 125 (2 cr.)
  - CHEM-C 126 (2 cr.)
- CHEM-C 341 (3 cr.)
- CHEM-C 342 (3 cr.)
- CHEM-C 343 (2 cr.)
- Select one of the folowing
  - CHEM-C 344 (2 cr.)
    - BIOL-L 323 (3 cr.)
- Select one of the following
  - PHYS-P 201 (5 cr.) PHYS-P 202 (5 cr.)
  - PHYS-P 221 (5 cr.) PHYS-P 222 (5 cr.)

- MATH-M 215 (5 cr.)
- PSY-K 300 statistics (3 cr.)
- Select one of the following:
  - CSCI-A 106 (3 cr.)
  - CSCI-C 106 (3 cr.)
    CSCI-A 201 (4 cr.)
  - CSCI-A 201 (4 cl.)
     CSCI C 201 (4 cl.)
  - CSCI-C 201 (4 cr.)

Students may specialize in the following emphasis areas by choosing at least 12 credit hours from the listed courses within the specialty area (courses not listed may be substituted with consent from the departmental chair):

#### **Biotechnology and Molecular Biology**

- Select from the following
  - BIOL-L 312 Cell Biology (3 cr.)
  - BIOL-L 323 Molecular Biology Laboratory (3 cr.)
  - BIOL-M 310 Microbiology (3-4 cr.)
  - BIOL-M 430 Virology (3 cr.)
  - BIOL-Z 317 Developmental Biology (3 cr.)
  - BIOL-Z 318 (3 cr.)

#### **Biomedical Sciences**

- Select from the following
  - BIOL-L 312 Cell Biology (3 cr.)
  - BIOL-L 321 Immunology (3 cr.)
  - BIOL-L 331 Human Genetics (3 cr.)
  - BIOL-L 391 Special Topics in Biology (including Autoimmunity) (1-3 cr.)
  - Select one from the following
    - BIOL-L 498 Professional Internship (cr. arr.)
      - BIOL-L 490 Individual Study (cr. arr.)
  - BIOL-M 310 Microbiology (3-4 cr.)
  - BIOL-M 430 Virology (3 cr.)
  - BIOL-M 440 Medical Microbiology (3 cr.)
  - BIOL-P 431 Human Physiology (3 cr.)
  - BIOL-Z 318 Developmental Biology (3 cr.)
  - BIOL-Z 466 Endocrinology (3 cr.)

#### **Ecology and Conservation Biology**

- Select from the following
  - BIOL-L 473 Ecology (3-4 cr.)
  - BIOL-L 476 Regional Ecology (2 cr.)
  - BIOL-L 482 Restoration Ecology (3 cr.)
  - BIOL-L 483 Conservation Biology (3 cr.)
  - BIOL-L 490 Independent Research (cr. arr.)
  - BIOL-Z 406 Vertebrate Zoology (3-4 cr.)
  - BIOL-B 355 Plant Diversity (4 cr.)

In addition to the above courses, the student is responsible for fulfilling the general requirements of the Bachelor of Science degree as established by the College of Arts and Sciences.

# Major in Biology - B.A.

#### Requirements

- Introductory courses BIOL-L 101\* (4 cr.)
- BIOL-L 102\* (4 cr.) prerequisite of BIOL-L 101
- BIOL-L 211 (3 cr.) prerequisite of BIOL-L 101

- BIOL-L 311 (4 cr.) prerequisite of BIOL-L 211
- At least 18 additional credit hours in biology upper-level (300-400) courses must be included.
- Students must complete at least two additional upper-level labs.

\*BIOL-L 101 and BIOL-L 102 must be taken in sequence.

A minimum of one course must be taken from the listed courses in each of the areas below

- Molecular and Cellular Biology
  - BIOL-L 312 (3 cr.)
  - BIOL-M 310 (3-4 cr.)
  - BIOL-L 321 (3 cr.)
  - BIOL-L 323 (3 cr.)
- Genetics, Development, Evolutionary Biology
  - BIOL-L 318 (3 cr.)
  - BIOL-Z 318 (3 cr.)
  - BIOL-L 331 (3 cr.)
  - BIOL-Z 466 (3 cr.)
- Ecology, Physiology, and Organismal Biology
  - BIOL-B 351 (3 cr.)
  - BIOL-B 352 (2 cr.)
  - BIOL-Z 406 (3 cr.)
  - BIOL-L 473 (3-4 cr.)
  - Select one of the following
    - BIOL-P 416 (3 cr.)
      - BIOL-P 461 (4 cr.)

Students should consult with the department for additional information concerning prerequisites and course content.

- The following are required and should be taken concurrently with BIOL-L 101 and BIOL-L 102
  - CHEM-C 105 (3 cr.)
  - CHEM-C 106 (3 cr.)
  - CHEM-C 125 (2 cr.)
  - CHEM-C 126 (2 cr.)

Students planning on graduate or professional school should take

- chemistry through CHEM-C 344
- PHYS-P 201
- PHYS-P 202
- mathematics at least through MATH-M 215
- statistics (PSY-K 300 or equivalent)
- computer language / application course.

BIOL-L 473, BIOL-M 440, or BIOL-Z 466 may satisfy the capstone requirement.

In addition to the above courses, the student is responsible for fulfilling the general requirements of the Bachelor of Arts degree as established by the College of Arts and Sciences. ree as established by the College of Arts and Sciences.

### Minor in Biology

Students wanting to minor in the biological sciences are required to take a minimum of 18 credit hours and may elect to have a minor in one of the following fields: general biology, microbiology, biotechnology, ecology, or human biology. Courses in these minor areas are to be chosen with the consent of the Department of Biology

# Special Programs for Preprofessional Students in the Health Sciences

Students interested in a preprofessional curriculum for medicine, dentistry, podiatry, optometry, or other health fields should refer to the preprofessional curriculum section in this bulletin. No specific major or degree program is required for preprofessional students. Students desiring a B.S. or B.A. biology degree should consult with the biology faculty to plan their course work. Most professional schools prefer students who will have completed a B.S. or B.A. degree before actually beginning the professional curriculum.

## **Options for Special Credit**

The department awards 3 hours of credit with a grade of S for BIOL-E 112 to students who score a 4 on the advanced placement examination and 6 hours of credit for BIOL-E 111 and BIOL-E 112 to students who score a 5 on the advanced placement examination. Students who score 650-690 on the College Entrance Examination Board (CEEB) exam earn 3 hours of credit for BIOL-E 112. Students who score 700 or better earn 6 hours of credit for BIOL-E 111 and BIOL-E 112. A grade of S in BIOL-E 111 and BIOL-E 112 may be earned by passing a departmental exemption examination given the first Wednesday evening of classes each semester. This credit satisfies the introductory course requirements, but carries no laboratory credit. Additional laboratory work, upon a review by the department chairperson, may be recommended to remedy any deficiencies in laboratory skills.

### **Courses for Nonmajors**

The BIOL-L 100 course offers the nonmajor an opportunity to examine the fundamental principles of biology and to prepare for more advanced courses should the decision be made to continue in biology.

The 200-400 level nonmajor courses are designed to acquaint students possessing minimal science background with the basic principles underlying the modern biological sciences. Emphasis is given to those biological concepts and advances that are of prime importance to the liberally educated nonscientist.

In addition to BIOL-L 100, the following courses are intended for nonmajors: BIOL-L 104, PHSL-P 130, BIOL-L 200, BIOL-M 200, BIOL-L 215, PHSL-P 261, PHSL-P 262, PHSL-P 263, BIOL-L 300, BIOL-L 302, BIOL-L 310, BIOL-L 316, BIOL-L 350, BIOL-L 363, BIOL-L 378, and BIOL-L 499

# Chemistry, Physics, and Astronomy

# Chemistry

#### About the Major in Chemistry

The chemistry major provides an excellent academic background for graduate school (B.S., B.S.-A.C.S. on B.A.); for a career as an industrial chemist (B.S., B.S.-A.C.S. or B.A.); for acceptance into medical, dental,

or other professional health-related programs; and for positions in chemical instrument sales or chemically related administrative positions.

Minimum Degree: Students not receiving the Professional (A.C.S.) degree are encouraged to take as many chemistry courses as possible above the minimum to enhance their professional skills and employment possibilities.

#### Recommended Minors (15 to 20 credit hours)

Although a minor is not required, it may enhance professional opportunities. Recommended minors: biology, computer science, geosciences, mathematics, or physics. Consult the chemistry department or the appropriate department for details. The B.S. degree is set up to enable the student who so desires to take a minor in one of these areas.

# About the B.S. or B.S. - A.C.S. Degree

#### (B.S., B.S.-A.C.S. on B.A.)

These degree programs are designed primarily for students planning to go on to graduate school or preparing for careers as industrial chemists. The American Chemical Society certifies these IU Northwest programs. Graduates of these programs will be recommended to the American Chemical Society as having fulfilled requirements of the ACS Committee on Professional Training. The B.S. degree emphasizes science courses as major requirements outside of the major required core; the B.A. emphasizes non-science courses outside of the required major core. The B.S. is set up to enable the student to easily obtain a minor in a related area (see the following).

Minimum Degree: Students not receiving the Professional (A.C.S.) degree are encouraged to take as many chemistry courses as possible above the minimum to enhance their professional skills and employment possibilities.

#### Bachelor of Arts (B.A.) Degree **Departmental Requirements**

Minimum degree requirements: 34-36 credit hours of chemistry including CHEM-C 105 - CHEM-C 106, CHEM-C 125, CHEM-C 126, CHEM-C 301, CHEM-C 310, CHEM-C 341, CHEM-C 342, CHEM-C 434, CHEM-C 361, CHEM-C 363, CHEM-C 430, CHEM-C 209 (waived if proficiency exam is passed), and at least one from CHEM-C 344, CHEM-C 362, CHEM-C 410, CHEM-C 483, Also required: MATH-M 215 - MATH-M 216 and PHYS-P 221 - PHYS-P 222 (CHEM-C 301 and proficiency examinations are the capstone requirements.)

#### **ACS-Certified Degree**

46 credit hours in chemistry including CHEM C105-CHEM C106, CHEM C125-CHEM C126, CHEM C301, CHEM C310, CHEM C341-CHEM C344 inclusively, CHEM C361-CHEM C363 inclusively, CHEM C409 (2 cr.), CHEM C410, CHEM C430, CHEM 0209 (waived if proficiency examination is passed) and any two of the following (one must be a chemistry course): CHEM C431, CHEM C441, CHEM C483; PHYS P301; or an advanced mathematics or

physics course. Also required: MATH M215-MATH M216, MATH M311; PHYS P221-PHYS P222; and CSCI C201.

Courses for ACS Degree (B.S. or B.A). Degree 15

See the Arts and Sciences section of this bulletin for non-science requirements. Students must also complete the general requirements of the College of Arts and Sciences

#### **Bachelor of Science (B.S.) Degree**

Departmental Requirements Chemistry: 46 credit hours minimum, including CHEM-C 105 - CHEM-C 106, CHEM-C 125 - CHEM-C 126, CHEM-C 301, CHEM-C 310, CHEM-C 341 - CHEM-C 344 inclusive, CHEM-C 361-- CHEM-C 363 inclusive, CHEM-C 409 (2 cr.), CHEM-C 410, CHEM-C 430, and at least one from among: CHEM-C 303, CHEM-C 335, CHEM-C 431, CHEM-C 441, or CHEM-C 483. CHEM-C 209 is also required or waived if proficiency examination is passed. (CHEM-C 301 and proficiency examinations are the capstone requirements.) Physics (10 cr.): PHYS-P 221 - PHYS-P 222; Mathematics (13 cr.): MATH-M 215 - MATH-M 216 and MATH-M 311; Biology (4 cr.): BIOL-L 101: Computer Science (4 cr.): CSCI-C 201; Ancillary science electives: minimum of 16 credit hours (consult department for a listing of approved courses). Total credit hours 123--128. Students must also complete the general requirements of the College of Arts and Sciences.

#### Bachelor of Science (B.S.) Degree (A.C.S.) Certified

Departmental Requirements Chemistry: 48 credit hours minimum. Requirements are the same as for the B.S. degree except CHEM-C 483 is required. Chemistry courses may be taken as electives but are not required for the B.S. (A.C.S.) degree. PHYS-P 301; or an advanced mathematics or physics course. Also required: MATH-M 215 - MATH-M 216, MATH-M 311; PHYS-P 221 - PHYS-P 222; and CSCI-C 201. German is strongly suggested as the foreign language. See the Arts and Sciences section of this bulletin for non-science requirements. Students must also complete the general requirements of the College of Arts and Sciences.

#### Courses for ACS Degree (B.S. or B.A). Degree

Suggested sequence of required science and mathematics courses:

#### **Freshman Year**

- CHEM-C 105 CHEM-C 106 Principles of Chemistry
- CHEM-C 125 CHEM-C 126 Experimental Chemistry I and II
- MATH-M 215 MATH-M 216 Analytical Geometry and Calculus I and II

#### Sophomore Year

- CHEM-C 341 CHEM-C 342 Organic Chemistry Lecture I and II
- CHEM-C 343 CHEM-C 344 Organic Chemistry Laboratory I and II
- PHYS-P 221 PHYS-P 222 Physics I and II
- MATH-M 311 Calculus III

#### **Junior Year**

- CHEM-C 361 CHEM-C 362 Physical Chemistry I and II
- CHEM-C 363 Physical Chemistry Laboratory
- CHEM-C 310 Analytical Chemistry

#### Senior Year

- CHEM-C 483 Biochemistry
- CHEM-C 301 Chemistry Seminar
- CHEM-C 409 Chemical Research
- CHEM-C 410 Principles of Chemical Instrumentation
- CHEM-C 430 Inorganic Chemistry

### Minor in Chemistry

#### Requirements

CHEM-C 105, CHEM-C 125, CHEM-C 106, CHEM-C 126, CHEM-C 341 and two advanced courses of 3 credit hours or more.

#### **Non-Major Chemistry Courses**

CHEM-C 100 The World of Chemistry (3 cr.); CHEM-C 101 Elementary Chemistry I (3 cr.) P: MATH-M 007 or equivalent; CHEM-C 102 Elementary Chemistry II (3 cr.) P: CHEM-C 101 Continuation of CHEM-C 101; CHEM-C 105 Principles of Chemistry I (3 cr.) P: two years of high school algebra or MATH-M 014, one year of high school chemistry; CHEM-C 125 recommended concurrently; CHEM-C 106 Principles of Chemistry II (3 cr.) P: CHEM-C 105 CHEM-C 126 recommended concurrently; CHEM-C 110 The Chemistry of Life (3 cr.); CHEM-C 121 Elementary Chemistry Laboratory I (2 cr.) P: CHEM-C 101 C: CHEM-C 101: CHEM-C 122 Elementary Chemistry Laboratory II (2 cr.) P: CHEM-C 101, CHEM-C 121, CHEM-C 102 C: CHEM-C 102; CHEM-C 125 Experimental Chemistry I (2 cr.) P: CHEM-C 105 C: CHEM-C 105; CHEM-C 126 Experimental Chemistry II (2 cr.) P: CHEM-C 106 or concurrent, CHEM-C 125.

# Interdepartmental Major in Environmental Science - B.S.

The Interdepartmental major involving Biology, Chemistry, and Geology in Environmental Science provides rigorous interdisciplinary background in the natural science segment of the environmental sciences, combined with a significant background in the allied disciplines of physics and mathematics, and coursework in environmental affairs. The degree is designed to prepare students for graduate programs, or employment as scientists in technical fields associated with the environmental industry and government sector. These disciplines include hydrology, environmental hazard mitigation, waste management, water and air quality issues, ecology, and habitat issues.

This is an interdepartmental degree. Students fulfill core requirements from the disciplines of geology, chemistry, and biology and choose two disciplines for an interdepartmental concentration area. Students are required to complete a minimum of 40 credit hours in the interdepartmental major – with a minimum of 12 credit hours at the 300- or 400-level in each area. Students are required to complete additional coursework in associated areas of study.

#### Requirements

Complete the general education requirements for the Bachelor of Science degree in the College of Arts and Science. Fulfill the following:

 Geology, Chemistry, and Biology requirements
 G101 – G102 Intro to Earth Science/Intro to Earth Science Lab (4 cr.)

- G221 Mineralogy Lecture/Lab (4 cr.)
- C105 C125 Principles of Chemistry I/Experimental Chemistry I (5 cr.)
- C106 C126 Principles of Chemistry II/Experimental Chemistry II (5 cr.)
- L101 Introduction to Biological Sciences I Lecture/Lab (4 cr.)
- L102 Intro to Biological Sciences II Lecture/Lab (4 cr.)
- Public and Environmental Affairs allied environment requirement
  - Select one of the following
    - SPEA E400 (Topics in Environmental Studies) – Environmental Law (3 cr.)
    - SPEA E400 (Topics in Environmental Studies) – Environmental Mediation (3 cr.)
- Complete a combined total of 40 credit hours from *two* scientific disciplines in the major. The 40 credit hour concentration need not be equally divided between the two disciplines. Each of the two areas should include a minimum of 12 credit hours of 300- 400-level coursework. The list of acceptable coursework is listed below. Coursework completed in the students' chosen disciplines from 2. above (Geology, Chemistry, and Biology requirements) count toward the total credit hours.
- Biology
  - B351 Fungi Lecture/Lab (3-4 cr.)
  - B355 Plant Diversity (4 cr.)
  - L473 Ecology Lecture/Lab (3-4 cr.)
  - L482 Restoration Ecology (3 cr.)
  - Z406 Vertabrate Zoology Lecture/Lab (3-4 cr.)
  - L490 Individual Study in Biology (3-6 cr.)
- Chemistry
  - C341 Organic Chemistry I (3 cr.)
  - C343 Organic Chemistry I Lab (2 cr.)
  - C303 Environmental Chemistry (3 cr.)
  - C310 Analytical Chemistry + Analytical Chemistry Laboratory (5 cr)
  - C409 Chemical Research (3-6)
- Geosciences
  - G317 Field and Laboratory Techniques (3 cr.)
  - G334 Sedimentology and Stratigraphy Lecture/Lab (4 cr.)
  - G451 Hydrogeology Lecture/Lab (4 cr.)
  - G407/G408 Senior Geosciences Research Project (3-6 cr.) Must be advisor approved
  - <u>G429e</u> Environmental Geology Field Camp (6 cr.) offered through IU Bloomington – or other chair-approved hydrogeology/Environmental Geology field camp. See list of pre-requisites in the list of classes at end of bulletin.
  - G490 Senior Seminar (1 cr.) must be environmentally-based and advisor approved
  - GEOG 415/515 Advanced Geographic Information Systems (GIS) (3 cr.) (offered

through VIGGA – class will meet at Valparaiso University).

- Students are responsible for fulfilling prerequisites for this course (GEOG 215) that are not part of the Environmental Science program.
- Allied Sciences (18 credit hours)
  - M215 Calculus I (5 cr.)
  - K300 Statistics (3 cr.)
  - P201 or P221 Physics I (5 cr.)
  - P202 or P222 Physics II (5 cr.)
- Senior Seminar (capstone) (integration of Biology/Chemistry/Geology into environmental topics of current importance) (1 cr.) – G490/L403/C301

#### **Electives**

The following list is designed to provide students with guidance in course selection. Students should speak to their advisors to choose elective courses that best meet their educational goals.

- Any coursework from Biology, Chemistry, and Geology that was not used to satisfy major requirements.
  - GEOG 230 Remote Sensing (3 cr.) (offered through VIGGA – class will meet at Valparaiso University)
  - M216 Calculus II (5 cr.)
  - SPEA H316 Environmental Health (3 cr.)
  - SPEA E400/V450 Environmental Planning (3 cr.)

# **Physics**

#### Major in Physics - B.A.

IU Northwest does not offer a major in physics. These requirements are for the Bloomington campus.

#### **Concentration Requirements**

Physics: At least 25 credit hours, including PHYS-P 201 -PHYS-P 202 or PHYS-P 221 - PHYS-P 222, PHYS-P 301. Recommended courses are PHYS-P 309, PHYS-P 332, PHYS-P 340.

Mathematics: MATH-M 215, MATH-M 216, and MATH-M 343 are required.

#### **Minor in Physics**

**Requirements** 16 credit hours including PHYS-P 201- -PHYS-P 202 or PHYS-P 221-PHYS-P 222, plus selections from PHYS-P 301, PHYS-P 320, PHYS-P 331, or PHYS-P 340. Alternatives are permissible with departmental approval.

#### **Courses for Non-Science Majors**

Courses PHYS-P 101 and PHYS-P 120 are intended for students majoring in the humanities, social sciences, and education. They assume little or no background in science or mathematics. All courses listed can be used to satisfy divisional distribution requirements; however, credit will be granted for only one of the following sequences: PHYS-P 101 - PHYS-P 102, PHYS-P 103 - PHYS-P 104, or PHYS-P 151 - PHYS-P 152. PHYS-P 151 - PHYS-P 152 will not fulfill the science require-ment for education majors. These courses are not open to physics majors.

# Communication

# About the Department of Communication

The communication program provides students with an opportunity to investigate communication processes as they occur within and among individuals, groups, organizations, and societies. Students analyze the human communication process, develop communication skills, and learn how to facilitate the communication of others. For purposes of organization and utility, courses in speech, communication, and telecommunications have been combined into a single administrative unit within the department.

The major in communication provides the student with a broad-ranged understanding of human communication processes and the ability to apply basic principles, methods, and findings of human communication research in a variety of settings. The major serves as a foundation for professional fields such as public relations, personnel, sales, and training as well as providing excellent preparation for graduate study in communication, law, the ministry, public administration, and business.

Communication (COMM), Speech (SPCH), and Telecommunications (TEL) courses are listed in separate sections.

# Major in Communication

#### Requirements

- 1. A minimum of 30 credit hours, with grades of C- or higher, in courses labeled SPCH, COMM, or TEL.
- As part of the 30 credit hours, students must take SPCH-S 122, SPCH-S 424, and one of the following: SPCH-S 405, SPCH-S 427, or SPCH-S 450.
- 3. After completing 21 credit hours in the major, students must take SPCH-S 400 (the capstone course).
- 4. The general education requirements set forth by the College of Arts and Sciences requires students pursuing the B.A. degree to take two courses designated as intensive writing courses. Communication majors must take a minimum of one intensive writing course from courses offered by the Department of Communication.
- 5. A minimum of 15 credit hours must be taken at the 300-400 level.
- Communication majors are required to augment their academic program in communication with a minor (a minimum of 15 credit hours) in another discipline. The student selects the minor area in consultation with a faculty advisor.

Most of the courses fall into one of three informal emphasis areas. A minimum of 12 credit hours in one area constitutes an emphasis in that area. The emphasis areas are as follows:

#### Emphasis Areas for Communication Majors Communication as Performance

- SPCH-S 313 Communication as Performance (3 cr.)
- COMM-C 320 Advanced Public Speaking (3 cr.)
- COMM-C 340 Practicum in Media Production (3 cr.)
- SPCH-S 405 Human Communication Theory (3 cr.)

- SPCH-S 414 Topics in Performance and Culture (3 cr.)
- SPCH-S 427 Cross-Cultural Communication (3 cr.)
- SPCH-S 450 Gender and Communication (3 cr.)
- COMM-M 460 Culture and Mass Communication (3 cr.)
- SPCH-S 480 Personal Narrative and Performance (3 cr.)

#### Total (27 cr.)

#### Media Studies and Cultural Communication

- TEL-C 200 Introduction to Mass Communication (3 cr.)
- TEL-R 308 Radio Production and Directing (3 cr.)
- COMM-C 340 Practicum in Media Production (3 cr.)
- COMM-C 351 TV Production I (3 cr.)
- SPCH-S 405 Human Communication Theory (3 cr.)
- SPCH-S 424 Empirical Research Methods in Speech Communication (3 cr.)
- SPCH-S 427 Cross-Cultural Communication (3 cr.)
- SPCH-S 450 Gender and Communication (3 cr.)
- COMM-M 460 Culture and Mass Communication (3 cr.)
- COMM-C 462 Media Theory and Criticism (3 cr.)

Total (30 cr.)

#### **Relational Communication**

- SPCH-S 322 Advanced Interpersonal Communication (3 cr.)
- SPCH-S 329 Discussion and Group Dynamics (3 cr.)
- SPCH-S 405 Human Communication Theory (3 cr.)
- SPCH-S 424 Empirical Research Methods in Speech Communication (3 cr.)
- SPCH-S 427 Cross-Cultural Communication (3 cr.)
- SPCH-S 440 Organizational Communication (3 cr.)
- SPCH-S 450 Gender and Communication (3 cr.)
- SPCH-S 480 Personal Narrative Research and Performance (3 cr.)

#### Total (24 cr.)

The Department of Communication is committed to making the communication major available to part- time and working students. Multiple courses are offered in the evening and during the summer to meet diverse scheduling needs. Communication majors must also complete the general education requirements for the Bachelor of Arts degree in the College of Arts and Sciences as well as general university requirements.

#### Internships

Internships are available for communication majors, mostly during fall semester. SPCH-S 490 requirements include minimums of junior or senior standing, 21 credit hours of completed communication courses, a 3.0 grade point average in the major, an overall 2.5 grade point average (or higher), faculty supervision, and departmental approval. Internship credit hours count as electives toward the total number of credit hours needed for graduation, but *do not count in the major.* 

## Interdepartmental Major in Afro-American Studies and Communication

The Departments of Communication and Minority Studies offer a thematically integrated major in Afro- American and Communication Studies. This interdepartmental major is designed for students who wish to combine substantial Afro-American studies with their work in the communication major. (Details available under the "Department of Minority Studies" section of this bulletin.)

#### Minor in Communication Requirements

- SPCH-S 121 (3 cr.)
- SPCH-S 122 (3 cr.)
- SPCH-S 223 (3 cr.)
- Select a minimum of 6 credit hours at the 300-400 level

With careful planning, it is possible for students to eventually earn a minor through successfully completing required courses offered during a combination of evenings, summer sessions, and weekends.

# **Computer Information Systems**

# Computer Information Systems Admission

Admission to any of the programs in this department will be determined on a competitive basis. Consult the department chairperson for specific details concerning application requirements and procedures.

# **B.S. in Computer Information** Systems (CIS)

## Requirements

- Complete a minimum of 120 credit hours. At least 36 of those credit hours must be at the 300-400 level.
- Complete distribution requirements (please see department for specific CIS requirements).
- Group V Major—Computer Information Systems Core (45 cr.)
  - CSCI-C 106 (3 cr.)
  - DPIS-D 150 (3 cr.)
  - CSCI-A 106 (3 cr.)
  - Select one of the following programming options
    - option A
      - CSCI-A 201 (4 cr.)
      - CSCI-A 302 (4 cr.)
    - option B
      - CSCI-A 201 (4 cr.)
      - CSCI-C 307 (3 cr.)
    - option C
      - CSCI-C 203 (4 cr.)
      - CSCI-C 320 (3 cr.)
    - option D
      - CSCI-A 210 (4 cr.)

- CSCI-A 346 (3 cr.)
- CSCI-A 247 (3 cr.)
  - Select one of the following options
  - option A
    - DPIS-D 330 (3 cr.)
    - DPIS-D 446 (3 cr.)
    - option B
      - CSCI-C 445 (3 cr.)
      - CSCI-C 446 (3 cr.)
- DPIS-D 345 (4 cr.)
- DPIS-D 350 (3 cr.)
- Select one of the following for the capstone requirement
  - CSCI-Y 398 (1-6 cr.)
  - CSCI-C 390 (1-3 cr.)
- Electives to complete 45 credit hours
- Students must also complete the general requirements of the College of Arts and Sciences
- Microcomputer Applications Proficiency Test
  - A microcomputer applications proficiency test allows students to test out of CSCI-A 106 Introduction to Computing (3 cr.). The test consists of online and written modules that measure the student's ability to perform various tasks upon actual computer files. Achieving a total minimum grade of 70 percent would allow a student to test out of CSCI-A 106. However, in order to receive credit hours for the course, a student must satisfactorily complete either CSCI-A 285 or DPIS-D 290 with a C (2.0) or higher. Such a student will be eligible for 3 credit hours of special credit with a grade of S. It is the responsibility of the student to request that CIS forward this information to his or her division.
  - Each module will be graded separately. Achieving a minimum grade of 70 percent for a module would allow a student to test out of that particular module. CIS provides a method for students to receive instruction only in the areas where placement scores indicate that they are deficient by teaching three 1 credit hour courses taught concurrently with CSCI-A 106: CSCI-A 103 (word processing), CSCI-A 104 (spreadsheets), and CSCI-A 105 (relational database).
- Total (45 cr.)
- Group VI: Minor
  - Students must select a minor in any area. (A business or SPEA minor is very marketable with the computer information systems degree.)
- Electives and Internship
  - Each student will be required to gain sufficient elective or internship credit to meet the minimum 120 credit hour requirement.

- A maximum of 6 credit hours may be awarded for successful completion of an internship. Credit not given for both COAS-W 398 and CSCI-Y 398 in excess of 6 credit hours. The CSCI-Y 398 Internship is considered a capstone course. While internships are opportunities to learn new skills, CIS interns are often hired based on their cumulative knowledge and ability to provide employers with needed skills. CIS Internship credit is normally awarded 1 credit hour a semester.
- Consult the department chairperson for specific details concerning registration requirements, procedures and testing schedules.

# **B.S. in Informatics (INFO)**

#### Requirements

- 1. A minimum of 122 credit hours are required to complete the degree requirements
- 2. Students must also complete the general requirements of the College of Arts and Sciences (please see department for specific CIS requirements)

#### General Education Requirements (39-49 cr.)

The general education requirements for Bachelor of Science in Informatics will parallel those for a Bachelor of Science degree in the College of Arts and Sciences. Specifically, in addition to the general requirements for this baccalaureate degree, candidates for the Bachelor of Science degree in Informatics must complete the following group requirements.

#### Group V—Major (55-58 cr.)

The major requirements are organized into three categories: Informatics Core (34 cr.) Informatics Electives (6 cr.)

Informatics Core (34 cr.) Informatics Electives (6 cr.) Cognate Area (15-18 cr.)

#### Informatics Core (34 credit hours)

Required (22 cr.)

- INFO-I 101 Introduction to Informatics (4 cr.)
- INFO-I 201 Mathematical Foundations of Informatics (4 cr.)
- INFO-I 202 Social Informatics (3 cr.)
- INFO-I 210 Information Infrastructure I (4 cr.)
- INFO-I 211 Information Infrastructure II (4 cr.)
- INFO-I 308 Information Representation (3 cr.)
- Select two of the following (6 cr.)
  - INFO-I 300 Human-Computer Interaction (3 cr.)
  - INFO-I 303 Organizational Informatics (3 cr.)
  - INFO-I 310 Multimedia Arts and Technology (3 cr.)
  - INFO-I 320 Distributed Systems and Collaborative Computing (3 cr.)
- Select one of the following three capstone options (6 cr.)
  - INFO-I 494 and INFO-I 495 Design and Development of an Information System I/II (3 -3 cr.)
  - INFO-I 492 and INFO-I 493 Thesis/Senior Project (3 - 3 cr.)

• INFO 1420 Internship in Informatics (1 cr. may be repeated up to 6 cr.)

#### Total (34 cr.)

# Informatics Electives (6 credit hours, 300 level or higher)

Please see the CIS Department for a list of acceptable courses.

Total (6 cr.)

# Cognate Area (15-18 credit hours)—Select one Cognate Area

Please see the individual departments for specific information on the Cognate Area.

# Interdepartmental Major: CIS and Fine Arts

Bachelor of Science in Computer-based Graphic Arts Computer-based graphic artists are sought-after in the

job market. The students who graduate with this degree will have a strong background in artistic (fine arts) and computer (CIS) skills. Computer-based graphic arts are widely used tools in business, industry, and the arts.

The student will have two official advisors—one in the Department of Fine Arts and one in Computer Information Systems—who will help plan the course of study in detail and with frequent consultations.

The general degree requirements are the same as for the Bachelor of Science in Computer Information Systems, except that the Group I requirement consists of only ENG-W 131, ENG-W 231, and MATH-M 118 and Group V Major requirements are replaced by the following:

# Group V Interdepartmental Major Requirements (45-47 cr.)

#### Department of Fine Arts (31-38 cr.)

- Select one of the following
  - FINA-F 100 (3 cr.)
  - FINA-F 102 (3 cr.)
- FINA-A 100 series (history of art) (3 cr.)
- 300- or 400- level art history (3 cr.)
- FINA-S 250 (3 cr.)
- FINA-S 351 (3 cr.)
- FINA-S 352 (3 cr.)
- FINA-S 353 (3 cr.)
- FINA-S 400 (1-3 cr.)
- FINA-S 413 (3 cr.)
- FINA-S 414 (3 cr.)
- FINA-S 415 (3 cr.)
- FINA-A 435 (3 cr.)
- FINA-S 497 (1-3 cr.)
- Complete requirements 5-7 for Major in Studio Practice
- Capstone course requirement
- •
- FINA-A 435 (3 cr.)
- FINA-S 497 (1-6 cr.)
- participating in the graduating senior exhibition

Total (31-38 cr.)

#### Computer Information Systems (18 cr.)

- CSCI-A 106 (3 cr.)
- CSCI-A 251 (3 cr.)
- CSCI-A 348 (3 cr.)
- Select one of the following
  - CSCI-A 340 (3 cr.)
  - DPIS-D 250 (3 cr.)
  - DPIS-D 490 (3 cr.)
- CSCI-C 390 (6 cr.)
- capstone course requirement
  - FINA-A 435 (3 cr.)
  - FINA-S 497 (1-6 cr.)
  - participating in the graduating senior exhibition

Total (18 cr.)

For Bachelor of Science degrees, all students must complete the group VI minor.

There is a Bachelor of Arts version of this inter-departmental degree. See the Fine Arts Department section for details.

# Interdepartmental Major: CIS and Mathematics

#### **Bachelor of Science in Simulation/Modeling Analysis**

The students who graduate with this degree will have a strong background in theoretical (mathematics) and practical (CIS) skills. Modeling and computer simula-tion are widely used tools in business, industry, and research. Computer simulation allows an investigator to test proposed alterations to existing systems as well as proposed designs for entirely new systems.

Work in this area requires strong mathematical, statistical, and computer skills. This program should appeal to students interested in mathematics, computers, business, and the sciences.

The student will have two official advisors—one in Mathematics and one in Computer Information Systems—who will help plan the course of study in detail.

The general degree requirements are the same as for the Bachelor of Science in Computer Information Systems, except that the Group V major requirements are replaced by the following:

# Group V Interdepartmental Major Requirements (43-45 cr.)

#### Department of Mathematics (22 cr.)

- MATH-M 215 (5 cr.)
- MATH-M 216 (5 cr.)
- MATH-M 301 (3 cr.)
- MATH-M 360 (3 cr.)
- MATH-M 447 (3 cr.)
- MATH-M 448 (3 cr.)

#### Total (22 cr.)

#### Computer Information Systems (21-23 cr.)

- CSCI-C 106 (3 cr.)
- DPIS-D 150 (3 cr.)

- Select one of the following
  - CSCI-C 201 (4 cr.)
  - CSCI-A 201 (4 cr.)
  - CSCI-C 307 (3 cr.)
  - CSCI-A 302 4 cr.)
- CSCI-C 343 (4 cr.)
- DPIS-D 410 (3 cr.)
- Select one of the following (1-3 cr.)
  - CSCI-C 390 (1-3 cr.)
  - DPIS-D 390 (1-3 cr.)
- Capstone course requirement
  - Select one of the following
    - CSCI-C 390 course (1-3 cr.)
    - DPIS-D 390 course (1-3 cr.), for which the student will write a complete project-thesis starting with a theoretical model of a problem and then writing a computer program solution in C++, Java, or other appropriate computer language. The possibility of internships also exists because the degree is highly application-oriented. An especially rewarding situation would combine the internship and the capstone experience into a single project-thesis.

Total (21-23 cr.)

For Bachelor of Science degrees, all students must complete the Group VI minor.

# Minor in Computer Information Systems (CIS)

- Requirements
  - CSCI-C 106 (3 cr.)
  - CSCI-A 106 (3 cr.)
  - 200 to 400 level (9 cr.)
  - Students must also complete general requirements of the College of Arts and Sciences.

#### Total (15 cr.)

Please see a CIS Department advisor for combinations of classes if you have a specific interest in a particular area.

# Postbaccalaureate Certificate in Computer Information Systems

A postbaccalaureate certificate in computer information systems is offered for students with baccalaureate degrees in another discipline who wish to complement their undergraduate education with course work similar to the requirement for a Bachelor of Science degree in computer information systems.

The postbaccalaureate certificate program enables the holder of a bachelor's degree with a major in another field to obtain formal recognition of training in the computer field. Students select one of five options after successfully meeting or completing the following prerequisites: ENG-W 131 and ENG-W 231 and MATH-M 118.

#### Requirements

• CSCI-C 106 (3 cr.)

- CSCI-A 106 (3 cr.)
- DPIS-D 150 (3 cr.)
- Select seven more courses with at least four of those courses taken at the 300 to 400 level.

Please see a CIS department advisor for combinations of classes if you have a specific interest in a particular area.

# **Economics**

The economics program is housed in the School of Business and Economics. Degrees in economics are awarded by the College of Arts and Sciences.

# **About Economics**

The economics program is housed in the School of Business and Economics. Degrees in economics are awarded by the College of Arts and Sciences.

### Major in Economics Requirements

- ECON-E 103 (3 cr.)
- ECON-E 104 (3 cr.)
- ECON-E 270 (3 cr.)
- Select one of the following
  - ECON-E 321 (3 cr.)
  - BUS-G 300 (3 cr.)
  - equivalent course work
  - Select one of the following
    - ECON-E 322 (3 cr.)
    - equivalent course work
- sufficient additional hours in Economics to total a minimum of 27 credit hours

#### Total (27 cr.)

Students may not count ECON-E 309 for credit toward the economics major. Students interested in majoring in economics should consult with a member of the economics faculty for additional information. Students planning to pursue a graduate degree in economics should plan a program of study, in consultation with a departmental advisor, which includes course work in economic theory and additional course work in mathematics and statistics. Students are responsible for completing the prerequisites for all economics courses and for fulfilling the general education requirements of the College of Arts and Sciences.

# **Minor in Economics**

## Requirements

- ECON-E 103 (3 cr.)
- ECON-E 104 (3 cr.)
- ECON-E 270 (3 cr.)
- Select one of the following
   ECON-E 321 (3 cr.)
  - BUS-G 300 (3 cr.)
  - equivalent course work
  - sufficient additional course work in economics to total a minimum of 18 credit hours

Total (18 cr.)

# English

# **Major in English**

#### Requirements

Select at least 10 courses above the 100 level, of which at least five must be on the 300-400 level (30 cr.)

- Select from the following to meet the requirement English literature before 1700
  - ENG-L 211 (3 cr)
  - Two courses from the sequence of courses from ENG-L 303 to ENG-L 320 (6 cr)
- Select from the following to meet the requirement English literature since 1700
  - ENG-L 212 (3 cr)
  - Two courses from the sequence of courses from ENG-L 325 to ENG-L 348 (6 cr)
- ENG-L 315 Major plays of Shakespeare (3 cr)
- American literature
  - One course from the sequence of courses from ENG-L 350 to ENG-L 363 (3 cr)
- ENG-L 440 (3 cr) (also fulfills capstone requirement)
- Students must submit a Senior Portfolio. Requirements for this are available in the English Department.
- Students must also complete the general requirements of the College of Arts and Sciences
- Writing courses which count as English electives
  - ENG-W 231 (3 cr)
  - ENG-W 233 (3 cr)
  - ENG-W 301 (3 cr)
  - ENG-W 303 (3 cr)
  - ENG-W 350 (3 cr)

#### Total (30 cr)

#### Recommendation

The department recommends that majors considering graduate work in English take elective courses in a variety of periods of English and American literature.

Students who expect to go on to graduate work are advised to take substantial work in at least one foreign language.

# Interdepartmental Major in Afro-American Studies and English

The Departments of Minority Studies and English offer a thematically integrated major in English and Afro-American studies. This interdepartmental major is designed for students who wish to combine substantial Afro-American studies with their work in the American and English literature major. (Details are available under the "Department of Minority Studies" section of this bulletin.)

# **Minors in English**

Students must complete the general requirements of the College of Arts and Sciences.

Following are the requirements for the three options for minors.

#### Literature Option

- Select one from the following
  - ENG-L 202 (3 cr.)
  - ENG-L 203 (3 cr.)
  - ENG-L 204 (3 cr.)
  - ENG-L 205 (3 cr.)
- Select one from the following
  - ENG-L 211 (3 cr.)
  - ENG-L 212 (3 cr.)
- Select one from the following
  - ENG-L 351 (3 cr.)
  - ENG-L 352 (3 cr.)
  - ENG-L 354 (3 cr.)
- Two additional 300 level courses in literature (3 cr.)

Total (15 cr.)

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#### Writing Option

- ENG-W 132 (3 cr.)
  - Select one from the following
    - ENG-W 231 (3 cr.)
      ENG-W 350 (3 cr.)
  - ENG-W 330 (3 cl.)
- Select one from the following
  - ENG-W 301 (3 cr.)
     ENG W 303 (3 cr.)
  - ENG-W 303 (3 cr.)
- Select 2 literature classes at the 200 or above level (6 cr.)

#### Total (15 cr.)

#### **Creative Writing Option**

- ENG-W 301 (3 cr.)
- ENG-W 303 (3 cr.)
- ENG-W 311 (3 cr.)
- 2 literature classes at the 200 or above level (6 cr.)

#### Total (15 cr.)

### Courses

#### **Developmental**

ENG-W 031 is an English developmental course.

#### Composition

Courses in composition include ENG-W 130, ENG-W 131, ENG-W 132, and ENG-W 140.

Students are not permitted to register for ENG-W 131 until they have taken English placement exams administered by the University Division. On the basis of the placement test scores, the student may be counseled to take ENG-W 031 or ENG-W 130 prior to ENG-W 131.

#### Writing

Courses in writing include ENG-W 201, ENG-W 231, ENG-W 233, ENG-W 301, ENG-W 303, ENG-W 350, ENG-W 398, and ENG-W 490. Before students are eligible to take further courses in writing, they must have completed ENG-W 131.

#### Literature

Courses in literature include ENG-L 101, ENG-L 102; the following courses are open to sophomores, juniors, seniors, and to second-semester freshmen who have completed either ENG-L 101 or ENG-L 102: ENG-L 201, ENG-L 202, ENG-L 203, ENG-L 204, ENG-L 205, ENG-L 207, ENG-L 211, ENG-L 212, ENG-L 295.

The following courses are ordinarily recommended for juniors and seniors: ENG-L 305, ENG-L 308, ENG-L 311, ENG-L 315, ENG-L 326, ENG-L 332, ENG-L 335, ENG-L 345, ENG-L 346, ENG-L 347, ENG-L 348, ENG-L 351, ENG-L 352, ENG-L 354, ENG-L 355, ENG-L 357, ENG-L 358, ENG-L 364, ENG-L 365, ENG-L 366, ENG-L 369, ENG-L 370, ENG-L 381, ENG-L 382, ENG-L 390, ENG-L 440, ENG-L 495.

#### Language

Courses in the English language include ENG-G 205, ENG-G 207, and ENG-G 310.

# **Fine Arts**

## **About Fine Arts**

Two types of courses are offered: history of art, taught by illustrated lectures and class discussion; and practice of art, consisting of studio work on creative and technical problems.

## **Major in Studio Practice**

The studio practice program enables the student to see, to formulate, and to articulate visual concepts through the manipulation of forms and materials. Its basic aim is to develop an awareness of visual expression within the humanist tradition.

#### Requirements

- A100 series history of art (6 cr.)
- Art history at the 300 and 400 level (6 cr.)
- Fundamental studio (9 cr.)
- Studio courses above the 100 level (25-34 cr.) must include a minimum of three and a maximum of six of the introductory (200-level) courses
- FINA-A 435 Art Theory for Graduating Seniors (3 cr.) must be taken during the fall semester.
- During the final year, each student must assume full responsibility for mounting a personal exhibit that will include terminal and representative work in the major field and, if applicable, in the minor field as well. To meet this requirement, the student must:
  - File in the departmental office an "Intent to Graduate" one calendar year prior to the intended completion date. You must meet with your principal teacher to determine if you are prepared to enroll in FINA-S 497.
  - Submit a portfolio of the most recent and best work in the major discipline to the departmental office before the completion of the fall semester, prior to enrolling in FINA-S 497. The studio program in the final year shall be coordinated with the evaluation of the portfolio.
  - Enroll in FINA-S 497 Independent Study in Studio Art for the spring semester during the final year.
  - Prepare the exhibit under the principal teacher's guidance. This will include drafting a descriptive statement about the work in the exhibit: goals, intent, approach, techniques, etc.

- Be prepared to exhibit in accordance with the departmental schedule at any time during the final semester. FINA-A 435 and FINA-S 497 fulfill the capstone requirement.
- Graduating Senior Exhibit
- Students must also complete the general requirements of the College of Arts and Sciences

#### Total (48-57 cr.)

A faculty committee whose evaluation will be used to determine the studio course grade in the final semester will judge the Graduating Senior Exhibit and the descriptive statement.

#### **Transfer Credit in Studio**

All incoming students who want to transfer studio credit from another institution must submit a portfolio. This should be in the form of slides, photographs, or compact discs, and should include the better work done in each course for which credit transfer is desired. The faculty shall devise a minimal studio program in residence, specifically based upon evaluation of the portfolio, for each transfer student.

## **Minor in Art History**

#### Requirements

- FINA-A 100 level art history courses (6 cr.)
- 300 or 400 level art history courses, excluding FINA-A 435 (9 cr.)

# Interdepartmental Major: CIS and Fine Arts

#### **Bachelor of Arts in Computer-based Graphic Arts**

The student will have two official advisors, one in the Department of Fine Arts and one in Computer Information Systems, who will help plan the course of study in detail with frequent consultations.

# Requirements in Computer Information Systems (18 cr.)

- CSCI-A 106 Introduction to Computing (3 cr.)
- CSCI-A 250 Introduction to Digital Application (3 cr.)
- CSCI-A 340 An Introduction to Web Programming (3 cr.)
  - or DPIS-D 250 Multimedia (3 cr.)
  - or DPIS-D 490 Current Directions in Data Processing and Information Systems (3 cr.)
- CSCI-A 348 Mastering the World Wide Web (3 cr.)
- CSCI-C 390 Individual Programming Laboratory (6 cr.)

#### Total (18 cr.)

#### Requirements in Department of Fine Arts (31-41 cr.)

- FINA-F 100 Fundamental Studio-Drawing (3 cr.) or FINA-F 102 Fundamental Studio-2D (3 cr.)
- 3 credit hours in the FINA A100 series (history of art)
- 3 credit hours of FINA 300 or 400 level art history
- FINA-S 250 Introduction to Design Practice (3 cr.)
- FINA-S 351 Graphic Design II (3 cr.)
- FINA-S 352 Production for Graphic Design (3 cr.)
- FINA-S 353 Graphic Design IV (3 cr.)
- FINA-S 400 Independent Studio Projects (1-6 cr.)
- FINA-S 413 Typography (2 cr.)

- FINA-S 414 Layout (2 cr.)
- FINA-S 415 Package Design (2 cr.)
- FINA-A 435 Art Theory (2 cr.)
- FINA-S 497 Independent Study in Fine Arts (1-6 cr.)

Total (31-41 cr.)

Complete requirements 5-7 for major in studio practice.

There is a Bachelor of Science version of this interdepartmental degree. See the "Department of Computer Information Systems " section for details.

#### Minor in Fine Arts

Six options: Drawing, Painting, Printmaking, Photography, Sculpture / Ceramics, Graphic Design

#### Required courses in all options:

- Select one of the following (3 cr.)
  - FINA-F 100
  - FINA-F 101
  - FINA-F 102
- Art history FINA-A 100 level (3 cr.)
- Studio art (9 cr.)
- Plus electives with emphasis in option area (see department for elective courses)

Total (15 cr.)

# Geosciences

# Geology

#### **About Geology**

The Department of Geosciences offers B.S. and B.A. degrees in Geology. The B.S. provides rigorous general background in the field of geology and allied disciplines. The degree is designed for students who wish to prepare for graduate school or employment as a professional geologist in the private sector, government sector, or environmental science and other related fields. This degree offers a more extensive requirement in biology. chemistry, mathematics, and physics compared with the B.A. and is designed to optimize student opportunities. The B.A. provides a general background in the field of geology and requires a diversified liberal arts education in place of some of the allied disciplines. It is an appropriate choice for those who wish to teach earth sciences at the secondary school level and those who wish to gain a general knowledge of the geosciences and their relationship to the other sciences. The department offers the learning experience through the traditional lecture series, laboratories, seminars, independent study in the field, laboratory and library, and through field trips to local sites and to geologically intriguing areas of North America. Each course for majors contains a field trip, and the department conducts one trip of two weeks duration after the spring semester.

#### Major in Geology - B.S.

Majors complete 39-41 credit hours in geology and 36 credit hours in the allied disciplines

1. Any *one* of the following 100-level courses AND GEOL G102 laboratory:

- GEOL G101 Introduction to Earth Science (3 cr.) AND G102 Intro to Earth Science Lab (1 cr.)
- GEOL G107 Environmental Geology (3cr.) AND G102 Intro to Earth Science Lab (1cr)
- GEOL G103 Earth Materials and Processes (3 cr.) AND G102 Intro to Earth Science Lab (1 cr.)

GEOL G209 History of the Earth (4 cr.)

- GEOL G221 Introductory Mineralogy (4 cr.)
- GEOL G222 Introduction to Petrology (4cr.)

GEOL G317 Field and Laboratory Techniques (3cr.)

GEOL G323 Structural Geology (4 cr.)

GEOL G334 Principles of Sedimentation and Stratigraphy (4 cr.)

GEOL G429 Field Geology in the Rocky Mountains (6 cr.) OR other chairperson approved geology field camp (5-6 credits) (fulfills capstone requirement for B.S. in Geology) GEOL G490 Undergraduate Seminar (fulfills capstone requirement for B.S. in Geology)

2. Complete one of the following sequences:

Two 400-level lecture-based geology courses (6-8 credit hours)

One 400-level lecture-based geology course (3-4 credit hours) AND one semester of research or internship fulfilled by one of the following courses:

- G407 Senior Science Project (3 cr.)
- G408 Senior Science Project (3 cr.)
- G460 Internship in Geology (3 cr.)
- 3. Allied Sciences

Chemistry (10 credits) CHEM C105-CHEM C106, CHEM C125-CHEM C126

Physics (10 credits) PHYS P221, PHYS P222 Mathematics (10 credits) MATH M215, MATH M216 Biology (3 credits)

4. A 300- or 400-level Math, Chemistry or Physics course.

5. Students must also complete the general requirements of the College of Arts and Sciences.

#### Major in Geology - B.A. Requirements

Majors complete at least 25-27 credit hours in geology, 15 credit hours in the allied disciplines and a minimum of 36 credit hours in courses at the 300-400 level.

1. Any one of the following 100-level courses AND GEOL G102 laboratory:

\* GEOL G101 Introduction to Earth Science (3 cr.) AND G102 Intro. to Earth Science Lab (1 cr.)

\* GEOL G107 Environmental Geology (3cr.) AND G102 Intro. to Earth Science Lab (1cr)

\* GEOL G103 Earth Materials and Processes (3 cr.) AND G102 Intro. to Earth Science Lab (1 cr.)

GEOL G209 History of the Earth (4 cr.) GEOL G221 Introductory Mineralogy (4 cr.) GEOL G222 Introduction to Petrology (4cr) GEOL G317 Field and Laboratory Techniques (3cr)

2. Any two 300- or 400-level lecture-based geology courses.

(The following GEOL (geology) courses fulfill the College of Arts & Sciences capstone requirement for the B.A. in Geology: G323, G406, G413, G415, G435, G451, G490)

3. Allied Sciences (15 cr.): Students must complete one of the following sequences:

\* CHEM C105-CHEM C125 and 10 additional credit hours of chemistry, mathematics, or physics

OR

\* Two semesters of College-level chemistry with corresponding laboratories and an additional 5 credit hours of mathematics (mathematics courses must be at or above the 100 level; MATH M100 and T-courses are excluded), or physics.

4. Students must also complete the general requirements of the College of Arts and Sciences. Including a minimum of 36 credit hours in courses at the 300-400 (junior-senior) level.

# Double Degree in Geology (B.A.) and Secondary Education (Earth/Space Science)

The College of Arts and Sciences and School of Education offer a double major in Geology (B.A.) and Secondary Education (Earth/Space Science). See an advisor for details and course requirements.

# Interdepartmental Major in Environmental Science - B.S.

The Interdepartmental major involving Biology, Chemistry, and Geology in Environmental Science provides rigorous interdisciplinary background in the natural science segment of the environmental sciences, combined with a significant background in the allied disciplines of physics and mathematics, and coursework in environmental affairs. The degree is designed to prepare students for graduate programs, or employment as scientists in technical fields associated with the environmental industry and government sector. These disciplines include hydrology, environmental hazard mitigation, waste management, water and air quality issues, ecology, and habitat issues.

This is an interdepartmental degree. Students fulfill core requirements from the disciplines of geology, chemistry, and biology and choose two disciplines for an interdepartmental concentration area. Students are required to complete a minimum of 40 credit hours in the interdepartmental major – with a minimum of 12 credit hours at the 300- or 400-level in each area. Students are required to complete additional coursework in associated areas of study.

#### Requirements

Complete the general education requirements for the Bachelor of Science degree in the College of Arts and Science. Fulfill the following:

 Geology, Chemistry, and Biology requirements
 G101 – G102 Intro to Earth Science/Intro to Earth Science Lab (4 cr.)

- G221 Mineralogy Lecture/Lab (4 cr.)
- C105 C125 Principles of Chemistry I/Experimental Chemistry I (5 cr.)
- C106 C126 Principles of Chemistry II/Experimental Chemistry II (5 cr.)
- L101 Introduction to Biological Sciences I Lecture/Lab (4 cr.)
- L102 Intro to Biological Sciences II Lecture/Lab (4 cr.)
- Public and Environmental Affairs allied environment requirement
  - Select one of the following
    - SPEA E400 (Topics in Environmental Studies) – Environmental Law (3 cr.)
    - SPEA E400 (Topics in Environmental Studies) – Environmental Mediation (3 cr.)
- Complete a combined total of 40 credit hours from *two* scientific disciplines in the major. The 40 credit hour concentration need not be equally divided between the two disciplines. Each of the two areas should include a minimum of 12 credit hours of 300- 400-level coursework. The list of acceptable coursework is listed below. Coursework completed in the students' chosen disciplines from 2. above (Geology, Chemistry, and Biology requirements) count toward the total credit hours.
- Biology
  - B351 Fungi Lecture/Lab (3-4 cr.)
  - B355 Plant Diversity (4 cr.)
  - L473 Ecology Lecture/Lab (3-4 cr.)
  - L482 Restoration Ecology (3 cr.)
  - Z406 Vertabrate Zoology Lecture/Lab (3-4 cr.)
  - L490 Individual Study in Biology (3-6 cr.)
- Chemistry
  - C341 Organic Chemistry I (3 cr.)
  - C343 Organic Chemistry I Lab (2 cr.)
  - C303 Environmental Chemistry (3 cr.)
  - C310 Analytical Chemistry + Analytical Chemistry Laboratory (5 cr)
  - C409 Chemical Research (3-6)
- Geosciences
  - G317 Field and Laboratory Techniques (3 cr.)
  - G334 Sedimentology and Stratigraphy Lecture/Lab (4 cr.)
  - G451 Hydrogeology Lecture/Lab (4 cr.)
  - G407/G408 Senior Geosciences Research Project (3-6 cr.) Must be advisor approved
  - <u>G429e</u> Environmental Geology Field Camp (6 cr.) offered through IU Bloomington – or other chair-approved hydrogeology/Environmental Geology field camp. See list of pre-requisites in the list of classes at end of bulletin.
  - G490 Senior Seminar (1 cr.) must be environmentally-based and advisor approved
  - GEOG 415/515 Advanced Geographic Information Systems (GIS) (3 cr.) (offered

through VIGGA – class will meet at Valparaiso University).

- Students are responsible for fulfilling prerequisites for this course (GEOG 215) that are not part of the Environmental Science program.
- Allied Sciences (18 credit hours)
  - M215 Calculus I (5 cr.)
  - K300 Statistics (3 cr.)
  - P201 or P221 Physics I (5 cr.)
  - P202 or P222 Physics II (5 cr.)
- Senior Seminar (capstone) (integration of Biology/Chemistry/Geology into environmental topics of current importance) (1 cr.) – G490/L403/C301

#### **Electives**

The following list is designed to provide students with guidance in course selection. Students should speak to their advisors to choose elective courses that best meet their educational goals.

- Any coursework from Biology, Chemistry, and Geology that was not used to satisfy major requirements.
  - GEOG 230 Remote Sensing (3 cr.) (offered through VIGGA – class will meet at Valparaiso University)
  - M216 Calculus II (5 cr.)
  - SPEA H316 Environmental Health (3 cr.)
  - SPEA E400/V450 Environmental Planning (3 cr.)

#### **Minors in Geology and Earth Science**

A minor in geology offers students majoring in other disciplines a solid background in the geological sciences. It should prove especially useful for students seeking careers with interdisciplinary emphasis (e.g., chemistry, biology, the environmental sciences). The earth science minor is designed to provide students planning careers involving the management of resources with sufficient background to understand basic geological principles and their relationships to human activities on earth.

#### Geology Minor (16 cr.)

- 1. Any one of the following 100-level courses AND GEOL-G 102 laboratory:
  - GEOL-G 101 Introduction to Earth Sciences (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
    - GEOL-G 107 Environmental Geology (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
    - GEOL-G 103 Earth Materials and Processes (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
- GEOL-G 209 History of the Earth (4 cr.)
- Additional coursework may be chosen in conjunction with a geology advisor but must consist of at least two lecture-based geology (GEOL) courses.

#### Earth Science Minor (16 cr.)

1. Any one of the following 100-level courses AND GEOL-G 102 laboratory:

- GEOL-G 101 Introduction to Earth Sciences (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
- GEOL-G 107 Environmental Geology (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
- GEOL-G 103 Earth Materials and Processes (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
- GEOL-G 209 History of the Earth (4 cr.)
- Additional coursework may be chosen in conjunction with a geology advisor but must consist of at least two lecture-based geology (GEOL) or geography (GEOG) courses.

# **About Geography**

#### **About Geography**

No major is offered in geography at IU Northwest.

The program in geography is designed to serve the following purposes:

- Contribute to the development of an informed citizenry
- Provide specific skills and knowledge of the discipline for those who plan to pursue careers in
  - Teaching geography, social studies, and/or earth science
  - Cartography and/or air photo analysis
  - Urban and/or regional planning
- Provide the background for graduate study

# Valparaiso-Indiana Geography and Geology Association

The purpose of this association is to provide educational opportunities on the undergraduate level in the geological and geographical sciences to the students enrolled at Valparaiso University and Indiana University Northwest. Provisions are made for full-time undergraduate students in those academic disciplines to enroll for the fall, spring, and summer under the following conditions:

 Students may take a maximum of two courses per semester at the other participating institution.
 Those courses will be treated as part of the student's normal load at his or her home institution, and tuition and fees will be paid accordingly.

3. The total number of credit hours to be taken will be determined by the home institution.

4. Students at Indiana University Northwest who wish to take courses at Valparaiso University should obtain the recommendation of the chairperson of the Department of Geosciences at Indiana University Northwest.
5. Grades earned shall be recorded at the home institution.

6. A grade point average of 2.0 must be achieved in VIGGA courses to qualify the student to register for courses at the host institution for the following semester.

Students matriculating at Indiana University Northwest may take courses among the following offered at Valparaiso: 101, World Human Geography; 102, Geography of the Non-Industrialized World; 104, Geomorphology; 200, American Ethnic Geography; 201, Economic Geography; 210, Current Themes in Geography; 215, Introduction to Geographic Information Systems; 225, Cartography; 230, Remote Sensing in Geography: 260, Environmental Conversation: 274, North American Indian on Film; 301, Regional Geographies of the World; 318, Field Study in European Geography; 320, Urban Geography; 321, Urban and Regional Planning; 360, Statistical Analysis in Geography; 361, Research Design; 385/585, Field Study; 414/515, Advanced Geographic Information; 466/566, Profession of Geography; 470/570, Political Geography; 474/574, Historical Geography of the United States; 486, Internship in Geography; 490/590, Selected Topics in Geography; 495, Independent Study; 497, Honors Work in Geography; 498, Honors Candidacy in Geography. See the Valparaiso University catalog for course descriptions.

# History, Philosophy, Political Science, and Religious Studies

# **About History**

The Department of History offers students a wide range of courses in American, European, and Asian history, along with other courses in non-Western history and historiography. The department also cross- lists courses with Minority Studies and Women's and Gender Studies. The goals of the department are to teach analysis of texts, research skills, and critical thinking, along with the local, national, and global interconnectedness of historical events.

#### Major in History Requirements

- HIST-H 105 (3 cr.)
- HIST-H 106 (3 cr.)
  - Select one of the following
    - HIST-H 113 (3 cr.)
    - HIST-H 114 (3 cr.)
- History courses numbered 200-499 (24 cr.), including
  - 2 courses in United States history (6 cr.)
  - 2 courses in European history (from the Middle Ages to the present) (6 cr.)
  - 2 courses in other areas or topics in history (e.g., ancient, non-European, non-U.S.) (6 cr.)
    - One of the 200-499 level courses must be a HIST-H 215 Proseminar in History, taken before the junior year or before the capstone courses, which, depending on its content, will count as a course in one of the three areas above.
- Before the final semster of senior year, majors must also take 2 courses in HIST-J 495 proseminar (HIST-J 495 fulfills capstone requirement).
- Majors must also take the other half of Western Civilization (HIST-H 113 or HIST-H 114) that they did not take in their major requirement as a culture requirement course or an elective.

The Department of History accepts any Latino studies courses with history designations toward the B.A. in history. Additionally, we will accept one CHRI number taken by students toward an A.A. in Latino studies and apply it to the B.A. in history toward completion of the required 24 credits of history courses at the 200 level and above.

#### Minor in History Requirements

# The department offers four **minor** concentrations in history for nonmajors.

• All of them require 200-499 history courses (15 cr.)

#### A general minor consists of

- United States history (3 cr.)
- European history (3 cr.)
- Another area or topic (3 cr.)
- Elective (3 cr.)
- HIST-J 495 proseminar (3 cr.)

#### A United States history minor consists of

- 3 courses in United States history (9 cr.)
- Non-United States history (3 cr.)
- HIST-J 495 proseminar (3 cr.)

#### A European history minor consists of

- 3 courses in European history (9 cr.)
- Non-European history course (3 cr.)
- HIST-J 495 proseminar (3 cr.)

#### An Asian history minor consists of

- 3 courses in Asian history (9 cr.)
- Non-Asian history course (3 cr.)
- HIST-J 495 proseminar (3 cr.)

# About Philosophy and Religious Studies

The curriculum of the philosophy program is designed to contribute to the intellectual training of all undergraduates and to acquaint them with some of the most important developments in the history of ideas. Courses in the program emphasize clear and cogent thinking about fundamental problems, locate the origins of these problems in the writings of the great philosophers, and provide in-depth examinations of proposed solutions. The department also offers courses in ethics designed for business and medical students.

#### Major in Philosophy Requirements

A minimum of 30 credit hours in philosophy. No more than 9 credit hours at the 100 level may be included. At least 9 credit hours must be taken at Purdue University Calumet. (No more than 12 credit hours from Purdue University Calumet can be counted toward fulfilling the major requirements unless waived by the department and the dean of the College of Arts and Sciences). Three courses from the sequence in the history of philosophy: PHIL-P 201, PHIL-P 211, PHIL-P 302, PHIL-P 304 or their Purdue equivalents. One course in logic and one course above the 100 level in each of the following four areas: (1) ethics, (2) metaphysics or epistemology, (3) twentieth-century philosophy, and (4) either PHIL-P 383 or PHIL-P 490 to fulfill the capstone requirement. Students must also complete the general requirements of the College of Arts and Sciences.

Students majoring in philosophy may register at IU Northwest for philosophy courses offered at Purdue University Calumet. Please see the chairperson of the Department of Philosophy and Religious Studies for details.

## Minor in Philosophy

#### Requirements

PHIL-P 100; one course in logic (PHIL-P 150); one course in ethics or social and political philosophy (e.g., PHIL-P 140 or PHIL-P 343); one course at 200 level or above; one elective 3 credit hour course in philosophy.

# **Political Science**

#### **About Political Science**

The Political Science program offers an opportunity for the systematic study of political institutions and processes leading to a degree in political science. Courses are offered in the following areas of study:

- Political theory and philosophy
- American political institutions and processes
- International relations and foreign policy
- · Comparative politics

Special features of the department's program include opportunities for field research, internships in governmental agencies, and a senior seminar for all political science majors.

A degree in political science is a liberal arts degree, and as such prepares students to assume the duties of citizenship; provides special knowledge and skills useful in public service, law, business, and other careers; and lays a foundation for the scholarly study of government and politics. Prospective political science students and majors are invited to discuss their interests with any member of the political science faculty.

#### Major in Political Science - B.A. Requirements

Political science majors are required to meet all the requirements for the Arts and Science degree. Political science majors should consult the "College of Arts and Sciences" section of this bulletin.

Political science majors must take 36 credit hours in political science, including POLS-Y 103 (Introduction to American Politics).

Majors are required to take the following courses

- POLS-Y 205 (3 cr.)
- POLS-Y 372 (3 cr.)
- POLS-Y 490 (3 cr.)
- International relations and comparative politics from the following courses (6 cr.)

- POLS-Y 360 (3 cr.)
- POLS-Y 362 (3 cr.)
- POLS-Y 366 (3 cr.)
- POLS-Y 401 comparative politics (3 cr.)
- American institutions and processes from the following courses (6 cr.)
  - POLS-Y 200 (3 cr.)
  - POLS-Y 301 (3 cr.)
  - Select one of the following
    - POLS-Y 304 (3 cr.)
    - POLS-Y 305 (3 cr.)
  - Select one of the following
    - POLS-Y 302 (3 cr.)
    - POLS-Y 308 (3 cr.)
  - POLS-Y 318 (3 cr.)
  - POLS-Y 319 (3 cr.)
  - POLS-Y 401 (3 cr.)
- Political theory and philosophy from the following courses (6 cr.)
  - POLS-Y 381 (3 cr.)
  - POLS-Y 382 (3 cr.)
  - POLS-Y 383 (3 cr.)
  - POLS-Y 384 (3 cr.)
- One course in statistics is also required of political science majors. ECON-E 270 would satisfy this requirement as well as the Arts and Sciences requirements. Other options include PSY-K 300 or SPEA-K 300.

**Recommended:** In addition to meeting departmental and general requirements, the political science department strongly suggests that political science majors take supporting courses in economics and history, especially American history.

# Minor in Political Science

# • POLS-Y 103 (

- POLS-Y 103 (3 cr.)
- Field of American institutions and domestic politics, and/or policy-administration (6 cr.)
- Field of international and/or comparative politics, and/or political theory (6 cr.)
- Any field of political science are required for a minor in political science (3 cr.)

#### Total (18 cr.)

#### **Minor in Pre-law**

Interdisciplinary Minor in the College of Arts and Sciences, the School of Business and Economics, and the School of Public and Environmental Affairs (SPEA).

Admission to law schools requires a baccalaureate degree and a Law School Admission Test (LSAT) score. The degree may be in any discipline. Students preparing for law school are advised to take courses in logical thought, American history, American politics, business, and criminal and civil law. While no specific courses are required, IU Northwest offers an interdisciplinary prelaw minor for students interested in attending law school.

#### Requirements

The minor includes six courses totaling 18 credits. Students in SPEA, the School of Business and Economics, and history majors in the College of Arts and Sciences could double-count courses that are required for their major or concentration, but they are required to take at least four courses or 12 credits outside of their major or concentration. The structure of the minor is as follows:

- BUS-L 201 Legal Environment of Business (3 cr.)
- HIST-H 106 American History II (Twentieth Century) (3 cr.)
- PHIL-P 150 Elementary Logic (3 cr.)
- POLS-Y 103 Introduction to American Politics (3 cr.)
- SPEA-J 101 American Criminal Justice System (3 cr.)
- One elective (3 cr.)

Students may pick from the following courses for the elective:

- BUS-A 201 Introduction to Financial Accounting (3 cr.)
- BUS-L 303 The Commercial Law (3 cr.)
- ECON-E 103 Introduction to Microeconomics (3 cr.)
- HIST-A 313 Origins of Modern America (3 cr.)
- HIST-A 315 Recent U.S. History (3 cr.)
- HIST-H 105 American History I (3 cr.)
- SPEA-H 441 Legal Aspects of Health Care (3 cr.)
- SPEA-J 301 Substantive Criminal Law (3 cr.)
- SPEA-J 303 Evidence (3 cr.)
- SPEA-J 306 The Criminal Courts Administration (3 cr.)

The prelaw advisor can approve an elective that is not on the list if it meets the educational objectives.

The university provides prelaw counseling for interested students. Contact the prelaw advisor at (219) 980-6841 or (219) 980-6636.

# **Departmental Honors Program**

Superior students are encouraged to pursue independent study and research through reading for honors courses at the junior and senior levels. Students with a grade point average of 3.4 in courses in history may write an honors thesis in their senior year with the consent of the department. Proposals should be submitted to the chairperson in the semester before the thesis is to be undertaken. Further information about advanced placement and the honors program may be obtained from the Department of History and Philosophy.

**The Paul J. Urcan Memorial Prize Award** Each year, the faculty of the Department of History and Philosophy selects a student, usually a graduating senior, who has done outstanding work in history to be awarded the Paul J. Urcan Memorial Prize.

Rhiman A. and Brenda Rotz Memorial Scholarship Each year, junior and senior students may submit a proposal for the scholarship, according to department guidelines. A committee of department faculty chooses the recipient.

# Mathematics and Actuarial Science

## **About the Department**

The Department of Mathematics serves students interested in one or more of the following:

- Applications of mathematics to the sciences, business, public and environmental affairs, actuarial science, etc.
- Mathematics teaching at any level
- Graduate study in mathematics
- Mathematical research

Students in college-level mathematics courses are generally assumed to have completed two years of high school algebra. All newly enrolled students should take the math placement test to determine their skill level and math class they could enroll in.

Placement testing and counseling are available through the Office of Admissions.

The order in which courses should be taken is shown in the following tree diagram, going from top to bottom:

- MATH M007-MATH M014. For students who lack the background in algebra for freshman-level college mathematics.
- MATH M100 and MATH M110. Terminal courses for students in the humanities and the Allied Health sciences Fulfills the Group I mathematics requirement in the College of Arts and Sciences.
- MATH M118, MATH M119. May be taken in either order. Primarily for majors in business and the social sciences.
- MATH M125-MATH M126. Preparation for calculus. Need not be taken by students with a strong background in algebra (including analytic geometry and logarithms) and trigonometry may be taken concurrently.
- MATH M215 Calculus. Intended for students majoring in mathematics and the sciences. Recommended as a strong elective in mathematics for others.

In addition to mathematics courses, all majors are strongly encouraged to study another discipline, in depth, which uses mathematics. Courses in physics, chemistry, computer science, and business are recommended. Students must also complete the general requirement of the College of Arts and Sciences.

Mathematics developmental courses include

- MATH-M 007
- MATH-A 007
- MATH-B 007
- MATH-M 014

Courses for nonmajors include

- MATH-M 100
- MATH-M 110
- MATH-M 118
- MATH-M 119

- MATH-M 125
- MATH-M 126
- MATH-K 200
- MATH-K 300
- MATH-T 101
- MATH-T 102
- MATH-T 103
- MATH-T 490

Courses recommended for mathematics majors include

- MATH-M 215
- MATH-M 216
- MATH-M 295
- MATH-M 301
- MATH-M 311
- MATH-M 312
- MATH-M 343
- MATH-M 360
- MATH-M 366
- MATH-M 371
- MATH-M 391
- MATH-M 393
- MATH-M 403
- MATH-M 405
- MATH-M 406
- MATH-M 413
- MATH-M 420
- MATH-M 425
- MATH-M 436
- MATH-M 447
- MATH-M 448
- MATH-M 451
- MATH-M 463
- MATH-M 469
- MATH-M 477
- MATH-M 483
- MATH-M 493
- MATH-T 336
- MATH-T 490
- MATH-Y 398

Courses for actuarial science include

- MATH-M 320
- MATH-M 325
- MATH-M 451
- MATH-M 485

# Major in Mathematics - B.A.

### Requirements (30-32 cr.)

- Required core courses (29 cr.)
  - MATH-M 215 (5 cr.)
    - MATH-M 216 (5 cr.)
    - · Select one of the following
      - MATH-M 301 (3 cr.)
        - MATH-M 303 (3 cr.)
    - MATH-M 311 (4 cr.) should be taken as soon possible after completion of MATH-M 216
    - MATH-M 360 (3 cr.)
    - MATH-M 393 (3 cr.)

- MATH-M 403 (3 cr.)
- Select one of the following
  - MATH-M 413 (3 cr.)
  - MATH-M 366 (3 cr.)
- Senior Thesis in Mathematics (1-3 cr.):
  MATH-M 493 (1-3 cr.) (a capstone course)
- Students must also complete the general requirements for the College of Arts and Sciences for the Bachelor of Arts degree

Total (30-32 cr.)

## Major in Mathematics - B.S.

#### Requirements (42-44 cr.)

- Required core courses (23 cr.)
  - MATH-M 215 (5 cr.)
  - MATH-M 216 (5 cr.)
  - MATH-M 301 (3 cr.)
  - MATH-M 311 (4 cr.)
  - MATH-M 360 (3 cr.)
  - Select one of the following
    - MATH-M 391 (3 cr.)
    - MATH-M 393 (3 cr.)
- Applications (12 cr.)
  - at least four additional 300- or 400 level mathematics courses not used for 1, 3, or 4.
- Senior Concentration (6 cr.)
  - Select 2 courses from the following
    - MATH-M 366 (3 cr.)
    - MATH-M 403 (3 cr.)
    - MATH-M 405 (3 cr.)
    - MATH-M 413 (3 cr.)
- Senior Thesis in Mathematics: (1-3 cr.)
  - MATH-M 493 (1-3 cr.) (a capstone course)

#### Requirements for the minor (15-20 cr.)

- Arts and Sciences Option
  - Mathematics majors are required to augment their academic program with a minor (minimum 15 credit hours) in another discipline. The student in consultation with a faculty advisor selects the minor area.
- Secondary Education Option
  - For students graduating with both, Secondary Education with major in mathematics and Bachelor of Science in mathematics, the minor requirement is waived.

Consult the Mathematics Department or the appropriate department for details.

# Major in Actuarial Science - B.S.

### Requirements (67-70 cr.)

- Mathematics core courses (23 cr.)
  - MATH-M 215 (5 cr.)
  - MATH-M 216 (5 cr.)
  - MATH-M 301 (3 cr.) or MATH-M 303 (3 cr.)
  - MATH-M 311 (4 cr.)

- MATH-M 360 (3 cr.)
- MATH-M 366 (3 cr.)
- Actuarial Science core courses (7-9 cr.) (One of these will be a capstone course)
  - MATH-M 320 (3 cr.)
  - MATH-M 325 (1-3 cr.)
  - MATH-M 485 (3 cr.)
- Computer Science core courses (7-8 cr.)
  - Select one of the following
    - Option1
      - CSCI-C 201 (4 cr.)
      - CSCI-C 307 (3 cr.)
    - Option 2
      - CSCI-A 201 (4 cr.)
      - CSCI-A 302 (4 cr.)
- Economics and Business core courses (21 cr.)
  - ECON-E 103 (3 cr.)
  - ECON-E 104 (3 cr.)
  - BUS-A 201 (3 cr.)
  - BUS-A 202 (3 cr.)
  - ECON-E 270 (3 cr.)
  - BUS-F 301 (3 cr.)
  - BUS-F 420 (3 cr.)
- Technical Electives (9 cr.) three courses not used for Computer Science core from:
  - Mathematics
    - MATH-M 312 (3 cr.)
    - MATH-M 325 (MATH-M 325 serves as a technical elective only when taken a second time in a different subject) (1-3 cr.)
    - MATH-M 343 (3 cr.)
    - MATH-M 371 (3 cr.)
    - MATH-M 447 (3 cr.)
    - MATH-M 448 (3 cr.)
    - MATH-M 451 (3 cr.)
    - MATH-M 469 (3 cr.)
    - MATH-M 477 (3 cr.)
  - Computer science
    - CSCI-C 203 (4 cr.)
    - CSCI-C 320 (3 cr.)
    - CSCI-C 343 (4 cr.)
    - CSCI-C 390 (1-3 cr.)
    - CSCI-C 340 (3 cr.)
    - The following serve as technical electives when not used as (3) Computer Science core courses.
      - CSCI-A 201 4 cr.)
      - CSCI-A 302 (3 cr.)
      - CSCI-C 201 (4 cr.)
      - CSCI-C 307 (3 cr.)
  - Business
    - BUS-L 201 (3 cr.)
    - BUS-N 300 (3 cr.)
    - BUS-P 301 (3 cr.)

- BUS-M 301 (3 cr.)
- BUS-M 303 (3 cr.)
- BUS-A 311 (3 cr.)
- BUS-A 312 (3 cr.)
- BUS-A 322 (3 cr.)
- BUS-A 325 (3 cr.)
- BUS-A 328 (3 cr.)
- BUS-A 424 (3 cr.)
- Students must also complete the general requirements of the College of Arts and Sciences for the Bachelor of Science degree.

#### Total (67-70 cr.)

For details concerning exact requirements, please consult the Department of Mathematics and Actuarial Science.

## Major in Mathematics - B.S. and Master of Science in Education with Major in Secondary Education

The Department of Mathematics and Actuarial Science and the School of Education offer a five-year program which results in a student graduating with Bachelor and Science degree in Mathematics from College of Arts and Sciences and Master of Science degree in Secondary Education from School of Education. Contact our department for further information and detailed schedule.

## **Minor in Mathematics**

An arts and sciences minor in mathematics consists of the courses

- MATH-M 215 (5 cr.)
- MATH-M 216 (5 cr.)
- Select one of the following
  - Option 1
    - Select one of the following
      - CSCI-C 201 (4 cr.)
      - CSCI-A 201 (4 cr.)
    - Mathematics courses above the 200 level (6 cr.)
  - Option 2
    - Mathematics courses above the 200 level (9 cr.)

Recommended courses

- MATH-M 301 (3 cr.)
- MATH-M 311 (4 cr.)
- MATH-M 343 (3 cr.)

## Major in Mathematics - B.S. and Master of Science in Education with Major in Secondary Education

The department of Mathematics and Actuarial Science and the School of Education offer a five-year program which results in a student graduating with a Bachelor of Science degree in Mathematics from the College of Arts and Sciences and a Master of Science degree in Secondary Education from the School of Education. Contact our department for further information and detailed schedule.

### Program for Secondary School Provisional Certificate in Mathematics

(See School of Education requirements.)

#### Required

- MATH-M 118 (3 cr.)
- MATH-M 126 (2 cr.)
- MATH-M 215 (5 cr.)
- MATH-M 216 (5 cr.)
- MATH-M 301 (3 cr.)
- MATH-M 311 (4 cr.)
  - Select one of the following
    - MATH-M 391 (3 cr.)
    - MATH-M 393 (3 cr.)
- MATH-M 360 (3 cr.)
- MATH-M 366 (3 cr.)
- MATH-T 336 (3 cr.)
- MATH-M 447 (3 cr.)
- Two approved mathematics electives (6 cr.) The following courses are recommended:
  - MATH-M 320 (3 cr.)
  - MATH-M 343 (3 cr.)
  - MATH-M 403 (3 cr.)
  - MATH-M 405 (3 cr.)
  - MATH-M 413 (3 cr.)

#### Total (43 cr.)

In order to finish this program in four years, the courses must be taken in the sequence and at the times recommended by the mathematics department. Most 300 and 400 level mathematics courses are offered every other year.

# **Programs for Applications**

The kinds and numbers of courses needed in applications of mathematics vary greatly, depending on the application. Students should consult their major department for such information.

Some of the mathematics courses most useful for applications are

- MATH-M 215
- MATH-M 216
- MATH-M 301
- MATH-M 311
- MATH-M 343
- MATH-M 360
- MATH-M 366
- MATH-M 371
- MATH-M 447
- MATH-M 448
- MATH-M 463
- MATH-M 477

Courses in computer science, business, and information systems are recommended, as well as courses in economics and the natural sciences.

# **Minority Studies**

# **About the Department**

The Department of Minority Studies offers programs leading to the Bachelor of Arts degree in Afro- American studies. The curriculum is designed to acquaint the student with the unique worldviews and experiences of Blacks and Latinos and the problems of minority groups in general. It prepares the student for the fields of community development, social services, minority group relations, and graduate study.

The university possesses a large and continuously growing library collection covering African, West Indian, and American experiences.

# **Afro-American Studies**

The curriculum leading to a Bachelor of Arts degree in Afro-American Studies is oriented toward professional preparation and graduate study. The two program sequences, Human Services and Community Development, place a heavy emphasis on education that is directly related to employment opportunities and graduate-level study. The department also offers a Bachelor of Arts degree in Afro-American Studies with a concentration in Latino Studies.

#### **Major in Afro-American Studies**

Requirements - a minumum of 30 cr.

- Required
  - AFRO-A 103 (3 cr.)
  - AFRO-A 301 (3 cr.)
  - AFRO-A 343 (3 cr.)
  - Select one of the following
     AFRO-A 398 (3 cr.)
    - AFRO-A 493 (3 cr.)
  - Select one of the following (3 cr.)
    - AFRO-A 150 Survey of the Culture of Black Americans (3 cr.)
    - AFRO-A 151 Minority People in the United States (3 cr.)
  - Select from the following Afro-American History and Culture courses(6 cr.)
    - AFRO-A 355 Afro-American History I (3 cr.)
    - Select one from the following
      - AFRO-A 379 Early Black American Writing (3 cr.)
      - AFRO-A 356 Afro-American History II (3 cr.)
    - AFRO-A 370 Recent Black American Writing (3 cr.)
    - AFRO-A 380 Contemporary Black American Writing (3 cr.)
  - Other courses in Afro- American studies or approved courses in sociology, psychology, or history may be taken to complete the major.
  - Twenty-five (25) credit hours of 200-400 level courses are required.
  - Students must also complete the general requirements of the College of Arts and Sciences.

# Interdepartmental Major in Afro-American Studies and Communication

The Departments of Communication and Minority Studies offer an interdepartmental major in Afro-American studies and communication that reflects an interdisciplinary and substantive field of study. An interdepartmental major in communication and Afro-American studies focuses the specialization of the study of the human communication process within the Afro-American experience. This focus enhances the application of principles, methods, and findings of communication studies in light of the history, culture, and theories of the Afro-American experience, including an Africana perspective. Students will integrate their communication studies emphasis (public and rhetorical communication, relational communication, media studies, or communication and culture) into the Afro-American studies major to create a systematic and coherent field of study.

#### **Requirements**

The chairpersons of the Departments of Minority Studies and Communication must jointly advise the interdepartmental major. Students must complete a total of 45 credit hours in the interdepartmental major.

Students must complete

- Afro-American studies (18 cr.)
  - Select one of the following
    - AFRO-A 150 (3 cr.)
    - AFRO-A 151 (3 cr.)
  - Select one of the following
    - AFRO-A 355 (3 cr.)
    - AFRO-A 379 (3 cr.)
  - Select one of the following
    - AFRO-A 356 (3 cr.)
    - AFRO-A 370 (3 cr.)
    - AFRO-A 380 (3 cr.)
- Afro-American studies electives (9 cr.)
  - 300 or 400 level
- Communication (speech, communication, journalism, telecommunications) (27 cr.)
  - SPCH-S 121 (3 cr.)
  - SPCH-S 122 (3 cr.)
  - 300 or 400 level (12 cr.)
  - SPCH-S 400 (3 cr.) and / or AFRO-A 493 (3 cr.)
  - Courses cross-listed in both departments may be taken in either department, but students may not receive credit in both departments for the same course.
  - Students may not receive credit toward the major for both SPCH-S 424 and AFRO-A 398

#### Total (45 cr.)

# Interdepartmental Major in Afro-American Studies and English

The Departments of Minority Studies and English offer a thematically integrated major in Afro-American Studies and English. This interdepartmental major is designed for students who wish to combine substantial Afro-American Studies with their work in the American and English literature major. Afro-American Studies is importantly multidisciplinary, requiring students to be familiar with the connected history and theories of the Afro-American experience across disciplines, including an Africana perspective. The interdepartmental major in Afro-American Studies and English provides students with this background as well as with an understanding of Afro-American literature, seen in the context of American and English literature. With this course of study, students will be able to integrate and synthesize knowledge and understanding of the total Afro-American experience as it coexists with English language and literature studies.

#### **Requirements**

The chairpersons of the Departments of Minority Studies and English must jointly advise the interdepartmental major. A combined minimum of 45 credit hours is required.

- Afro-American Studies 300 level or above (18 cr.)
  - AFRO-A 355 (3 cr.)
    - AFRO-A 356 (3 cr.)
    - AFRO-A 493 (multidisciplinary capstone course) (3 cr.)
    - Select from the following (9 cr.)
      - AFRO-A 370 (3 cr.)
      - ENG-L 370 (3 cr.)
      - AFRO-A 379 (3 cr.)
      - AFRO-A 380 (3 cr.)
      - AFRO-A 392 (3 cr.)
- English (27 cr.)
  - ENG-L 202 (3 cr.)
  - ENG-L 212 (3 cr.)
  - ENG-L 315 (3 cr.)
    - Select one of the following
      - ENG-L 351 (3 cr.)
      - ENG-L 352 (3 cr.)
      - ENG-L 355 (3 cr.)
  - Select one of the following
    - ENG-L 354 (3 cr.)
    - ENG-L 357 (3 cr.)
    - ENG-L 358 (3 cr.)
  - ENG-L 440 (3 cr.)

#### Total (45 cr.)

A 2.0 cumulative grade point average is required in the courses taken in the interdepartmental major. Only courses with a grade of C- or higher will be counted in the major.

#### Minor in Afro-American Studies Requirements

- Select one of the following
  - AFRO-A 150 (3 cr)
  - AFRO-A 151 (3 cr)
- 4 additional courses in Afro-American studies to be selected in consultation with the departmental advisor. (12 cr)

Total (15 cr)

# **Latino Studies**

Latino studies is an interdisciplinary program designed to acquaint the student with the worldview and experience of Chicanos and Puerto Ricans in the United States. The curriculum emphasizes the history, culture, and socioeconomic conditions of Latino people while also examining the nature of minority groups in American society. An Associate of Arts degree (15 credit hours) in Latino studies is available to every student at IU Northwest. The program also offers courses for the bilingual education endorsement in the School of Education, the education minor in ethnic and cultural studies, and the education major with bilingual emphasis.

#### Minor in Latino Studies Requirements

- CHRI-C 101 (3 cr.)
- CHRI-C 151 (3 cr.)
- 12 credit hours from the course listings (course numbers in parentheses indicate cross-listing in the Department of History) (12 cr.)

Total (18 cr.)

# **Minor in Race-Ethnic Studies**

Race-Ethnic Studies allows students interested in Afro-American and Latino Studies to develop a focus of study in both programs. This field leads to a broad understanding of the minority experience in the United States and those of diaspora peoples; how the phenomena of race, gender, and class have influenced communities and individuals; how minority groups define themselves and what strategies they have utilized for survival; who the people called African Americans, Latinos, Native Americans, and Asian Americans are.

Credit Hours Required—A minimum of 15 credit hours required.

#### Requirements

- AFRO-A 151 / CHRI-C 151 Minority People in the United States (3 cr.)
- 4 courses from the listings for the Department of Minority Studies (IU Northwest Bulletin) (3 cr.)
- Meeting the following distribution pattern
  - 2 courses from course listings in Afro-American studies (6 cr.)
  - At least one course at 200, 300, or 400 level (3 cr.)
  - 2 courses from course listings in Latino Studies (6 cr.)
  - At least 1 course at 200, 300, or 400 level (3 cr.)

#### Total (15 cr.)

# **Postbaccalaureate Certificates**

#### **Community Development/Urban Studies**

This certificate is for students who have completed an undergraduate degree and would like formal recognition of a proficiency in the field of Community Development and Urban Studies. The focus of study will be on community development, community economic development, and urban studies within a matrix of the minority experience. This certificate has wide appeal from educators to practitioners in fields such as community development, planning, and public policy. This certification meets a specific need for persons intending to hold or holding positions in the field beyond the entry level, such as Community Development Planner II; or entry-level positions that require postbaccalaureate certification and/or experience.

#### Requirements

- Department of Minority Studies or approved courses from other departments (18 cr.)
  - Select from one of the following
    - AFRO-A 150
    - AFRO-A 151
  - CHRI-C 151 Minority People (3 cr.)
- Department of Minority Studies courses which be distributed among community development, urban studies and economic policy (12 cr.)
  - AFRO-A 103
  - AFRO-A 230
  - AFRO-A 240
  - AFRO-A 301
  - AFRO-A 302
  - AFRO-A 304
  - AFRO-A 341AFRO-A 343
  - AFRO-A 343
     AFRO-A 398
- Three (3) credit hours in capstone, research or project

#### **Race-Ethnic Studies**

course.

This certificate is for students who have completed an undergraduate degree and would like formal recognition of a proficiency in the field of Race-Ethnic Studies (see Minor in Race-Ethnic Studies). This certificate has wide appeal from educators to those in business.

#### Requirements

- Select one of the following
   AFRO-A 150
  - AFRO-A 151
- CHRI-C 151 Minority People (3 cr.)
- Department of Minority Studies, must be distributed between Latino Studies and Afro-American Studies (12 cr.)
- Capstone or research course, must be interdisciplinary (3 cr.)

# Modern Languages, Comparative Literature, and Linguistics

# French

The program in French embraces courses at all levels, elementary through advanced, and includes the culture and literature of France, Québec, and other Francophone regions of Africa and the Caribbean.

#### **Major in French**

The program in French embraces courses at all levels, elementary through advanced, and includes the culture and literature of France, Québec, and other Francophone regions of Africa and the Caribbean.

## Requirements

- Courses above FREN-F 150 including FREN-F 328, FREN-F 380 (30 cr.)
- Chosen among FREN-F 300, FREN-F 305, and FREN-F 306 (6 cr.)
- 400 level courses (9 cr.)
- · Select one of the following
  - SPAN-S 100 (or a more advanced course taught in Spanish)
  - Select from the following list of culture options (3 cr.)
    - SPAN-S 230
    - SPAN-S 231
    - SPAN-S 240
    - SPAN-S 241
    - SPAN-S 251
    - SPAN-S 260
    - SPAN-S 290
    - CDNS-C 101
    - CDNS-C 301
    - CDNS-C 350
    - CDNS-C 400
    - CDNS-C 495
    - CMLT-C 340

#### Minor in French

Requirements

- FREN-F 200 / FREN-F 250 or equivalent earned through special credit
- 3 courses at the third-year or fourth-year level, taught in French
- Fourth-year level courses may only be taken with permission of instructor

#### **Special Credit**

A student who places at the third-year level on the language placement test and receives a grade of C or higher in the validating third-year level course will be eligible to receive 6 hours of special credit with a grade of S. A student who places in the second semester of the second year and completes the validating course with a grade of C or higher will be eligible to receive 3 hours of special credit with a grade of S. The course numbers FREN-F 200 / FREN-F 250 will be used to designate this credit.

#### **Foreign Study**

Outstanding students with a substantial command of French are eligible to apply for enrollment in the Overseas Study Program at Aix-en-Provence. Full credit will be received for the academic year spent abroad. Students may also apply to the six-week, 6 credit hour summer program in Paris, or the five-week, 6 credit hour summer program in Québec.

#### **Courses in English**

The following courses are taught in English.

- FREN-F 309
- FREN-F 310
- FREN-F 311
- FREN-F 312
- FREN-F 341

No credit in French.

# **Spanish**

The program offers courses at all levels, elementary through advanced, on the Spanish language and the cultures and literatures of Spain and Latin America.

#### Major in Spanish

#### Requirements

- Courses above SPAN-S 150, including SPAN-S 360
   (30 cr.)
- Chosen among SPAN-S 311, SPAN-S 312, SPAN-S 317, SPAN-S 323, and SPAN-S 363 (9 cr.)
- 400 level courses (9 cr.)
- Select one of the following
  - FREN-F 100 (or a more advanced course taught in French)
  - Select from the following list of culture options (3 cr.)
    - FREN-F 309
    - FREN-F 310
    - FREN-F 311
    - FREN-F 312
    - FREN-F 341
    - CMLT-C 261
    - CMLT-C 340
    - CDNS-C 101
    - CDNS-C 301
       CDNS-C 350
    - CDNS-C 350
       CDNS-C 400
    - CDNS-C 400
      CMLT-C 460
    - CIVIL 1-C 460
       ODNO 0 405
    - CDNS-C 495

The Department of Modern Languages will accept one CHRI course that is cross-listed with Spanish and taken by students toward an A.A. in Latino Studies and apply it to the B.A. in Spanish toward completion of the required 30 credits of Spanish courses at the 200 level and above.

## Minor in Spanish

#### Requirements

SPAN-S 200 / SPAN-S 250 or equivalent earned through special credit and three courses at the third-year or fourth-year level, taught in Spanish. Fourth-year level courses may only be taken with permission of instructor.

#### **Special Credit**

A student who places at the third-year level on the language placement test and receives a grade of C or higher in the validating third-year level course will be eligible for 6 hours of special credit with a grade of S. A student who places in the second semester of the second year and completes a validating course with a grade of C or higher will be eligible to receive 3 hours of special credit with a grade of S. The course numbers SPAN-S 200 / SPAN-S 250 will be used to designate this credit.

#### **Native Speakers**

Students who are native speakers of Spanish *must get permission* from the department in order to enroll in SPAN-S 311 / SPAN-S 312, SPAN-S 317 SPAN-S 323, SPAN-S360, and SPAN-S363. Questions about the major or minor should be directed to the department chair.

#### **Undergraduate Study Abroad**

IU Northwest, through the Office of Overseas Study at Indiana University Bloomington, provides various opportunities for students of Spanish to study in a Spanish-speaking country. Qualified students who want to participate in a one-year academic program are encouraged to apply for the program offered in Madrid, Spain. Through the Council on International Educational Exchange, in which Indiana University cooperates, undergraduate students may also apply to participate in a one-semester program in Seville, Spain. Summer study programs are available in Bilbao and Salamanca, Spain, and at the Universidad Iberoamericana in Mexico City. Credits earned in these programs can be used to fulfill requirements for the baccalaureate degree. In addition, the Committee on Institutional Cooperation (CIC), of which Indiana University is a member, offers a summer study program in Guanajuato, Mexico. This program is intended primarily for students whose area of specialization is Spanish.

The Department of Modern Languages strongly recommends foreign study at the undergraduate level for those students who plan to become teachers of Spanish. In all cases where credit is sought for work done abroad, the student must consult the department chairperson before enrolling in foreign institutions. Information and applications for foreign study programs can be obtained from the campus coordinator for the Office of Overseas Study.

#### **Courses in English**

The following Spanish courses are taught in English

- SPAN-S 230
- SPAN-S 231
- SPAN-S 240
- SPAN-S 241
- SPAN-S 251
- SPAN-S 260
- SPAN-S 284
- SPAN-S 290

No credit in Spanish.

## German

#### **Foreign Study**

Outstanding students with a substantial command of German may apply for a year's study, with full credit, at the Indiana-Purdue Center of Undergraduate Studies at the University of Hamburg. Juniors may, upon the recommendation of the dean of the College of Arts and Sciences, take their third year abroad with Indiana University credit of 30 hours. Students must consult the departmental foreign study advisor before enrolling in foreign institutions.

# **Canadian Studies**

The Canadian Studies program gives students a better understanding of the diverse origins and multifaceted character of Canada. It gives direction and depth to the student's liberal arts education through a focus on Canada.

#### **Minor in Canadian Studies**

The minor in Canadian Studies may consist of either A or B

A. 15 credit hours to include

CDNS-C 101 Canadian Studies (3 cr.) CDNS-C 301 (3 cr.) Select three of the following

- CDNS-C 350 (3 cr.)
- CDNS-C 400 (3 cr.)
- HIST-H 230 (3 cr.)
- POLS-Y 217 (3 cr.)
- GEOL-T 315 (3 cr.)
- CDNS-C 495 (3 cr.)

Total (15 cr.)

B. 18 credit hours to include

FREN-F 200 (3 cr.) FREN-F 250 or equivalent (3 cr.) CDNS-C 101 (3 cr.) CDNS-C 301 (3 cr.) Select two of the following

- CDNS-C 350 (3 cr.)
- CDNS-C 400 (3 cr.)
- HIST-H 230 (3 cr.)
- POLS-Y 217 (3 cr.)
- GEOL-T 315 (3 cr.)
- CDNS-C 495 (3 cr.)

Total (18 cr.)

# **Performing Arts**

## **Performing Arts**

Performing arts provides academic curricula in music, theatre, and dance for students who seek to develop careers in these areas. Extensive performance programs provide practical experiences that complement classroom study.

# Music and Dance Program

The Department of Performing Arts offers coursework in a variety of Music and Dance Courses for students who wish to learn a new instrument, dance style, or further refine their skills.

#### Music courses include:

- MUS-M174 Music for the Listener
- MUS-L101 Beginning Guitar
- MUS-P100 Piano
- MUS-V100 Voice

#### Dance courses include:

MUS-J100 Ballet

- MUS-J200 Ballet
- MUS-J210 Jazz Dance
- MUS-J305 Ballet for the Nondegree Student
- MUS-J320 Pointe Technique

# **Major in Theatre**

The Department of Performing Arts (THTR) recognizes a symbiotic relationship between theatre production experience and classroom study. Requirements for the Major in Theatre are therefore distributed between practicum, production laboratory, and academic courses in the performing arts.

#### Requirements (39 cr.)

- Theatre CORE courses (12 cr.)
  - THTR-T 120 Acting I (3 cr.)
  - THTR-T 228 Design for the Theatre (3 cr.)
  - THTR-T 340 Directing I (3 cr.) prerequisite THTR-T 120 and THTR-T 228 or consent of instructor
  - THTR-T 490 Independent Study in Theatre and Drama (3 cr.) - must be a minimum 3 credit hour capstone project
- 6 credit hours in each of the following 3 areas (18 cr.):
  - Production Experience (6 cr.)
    - THTR-T 168 Practicum (1-3 cr. per semester, sophomore standing or consent of instructor)\*
- Laboratory Experience (6 cr.)
  - Select two from the following:
    - THTR-T 225 Stagecraft I (3 cr.)
    - THTR-T 230 Costuming I (3 cr.)
    - THTR-T 335 Stage Lighting (3 cr.)
- History, Literature, Theory (6 cr.)
  - THTR-T 470 Theatre and Society I (3 cr.)
  - THTR-T 471 Theatre and Society II (3 cr.)
  - Or another theatre history course approved by the department
- THTR elective credit hours (9 cr.)
- 300 level or above in major (15 cr.)

Students are advised to determine an AREA OF CONCENTRATION in consultation with a principal teacher in their chosen area (acting, directing, design, stage management, technical production, dramaturgy, etc.)

\*Practicum credit is given for approximately 40 hours assigned work on any Theatre Northwest production. Assignments are finalized in the first week of the semester. Students are encouraged to apply for significant creative and crew positions prior to semester of production.

## **Minor in Theatre**

#### Requirements

- THTR-T 168 Practicum (3 cr.)
- Select one of the following
  - THTR-T 120 Acting I (3 cr.)
    - THTR-T 228 Design for the Stage (3 cr.)
- Select one of the following labs (3 cr.)

- THTR-T 225 (3 cr.)
- THTR-T 230 (3 cr.)
- THTR-T 335 (3 cr.)
- Select one of the following Theatre and Society courses (3 cr.)
  - THTR-T 470 (3 cr.)
  - THTR-T 471 (3 cr.)
- THTR elective (3 cr.)

Total (15 cr.)

# **Psychology**

# About the Department of Psychology

The Department of Psychology offers a major in psychology leading to the B.A. degree and the B.S. degree, a major in psychology with a concentration in Women's and Gender Studies leading to the B.A. degree. and provides course work for undergraduates who want to satisfy distribution requirements. As a science, psychology seeks to understand the basic principles by which living organisms adapt their behavior to the changing physical and social environments in which they live. The breadth of the discipline, with its links to the humanities, mathematics, and other social and natural sciences. encourages the development of broad problem- solving skills through exposure to experimental methodology and statistical analysis, and contributes to personal growth and the development of communication skills. Psychological knowledge, techniques, and skills obtained in the B.A. and B.S. programs are applied in many careers and provide background for students entering graduate work in psychology and related areas, as well as the professions of medicine, dentistry, law, and business.

Career opportunities for psychology majors at the bachelor's degree level exist in mental health clinics, social welfare agencies, government, personnel departments, and business and industry. A wider range of professional opportunities is open to those who complete master's or doctoral degrees. It is strongly recommended that prospective majors discuss their career objectives with a member of the Department of Psychology early so that appropriate course planning can be accomplished.

The Department of Psychology maintains a chapter of Psi Chi, the international honor society in psychology. With both academic and social interests, the chapter sponsors speakers, workshops, films, and field trips. Students interested in joining should contact the department chairperson.

# Major in Psychology - B.S.

**Purpose** The Bachelor of Science in Psychology degree provides students with a rigorous general background in the field of psychology and allied disciplines. The degree is designed for students who wish to prepare for graduate or professional school training in psychology or related fields. The more extensive requirements in biology, chemistry, mathematics, and physics have been selected to optimize the student's future opportunities.

#### Requirements (36 cr.) including the following classes

- PSY-P 101 (3 cr.) prerequisites for all courses
- PSY-P 102 (3 cr.) prerequisites for all courses

- PSY-P 211 (3 cr.) prerequisites for all 400-level laboratory courses
- PSY-K 300 (3 cr.) prerequisites for all 400-level laboratory courses
- Area A
  - Select a minimum of 3 of the following
    - PSY-P 325 (3 cr.)
    - PSY-P 326 (3 cr.)
    - PSY-P 327 (3 cr.)
    - PSY-P 329 (3 cr.)
    - PSY-P 335 (3 cr.)
    - PSY-P 388 (3 cr.)
    - PSY-P 407 (3 cr.)
    - PSY-P 417 (3 cr.)
- Area B
  - Select a minimum of 2 of the following
    - PSY-P 303 (3 cr.)
    - PSY-P 314 (3 cr.)
    - PSY-P 316 (3 cr.)
    - PSY-P 319 (3 cr.)
    - PSY-P 320 (3 cr.)
    - PSY-P 324 (3 cr.)
    - PSY-P 336 (3 cr.)
    - PSY-P 389 (3 cr.)
    - PSY-P 425 (3 cr.)
    - PSY-P 430 (3 cr.)
- Select 1 from the following Advanced Laboratory Courses which also satisfies the capstone requirement
  - PSY-P 421 (3 cr.)
  - PSY-P 424 (3 cr.)
  - PSY-P 429 (3 cr.)
  - PSY-P 435 (3 cr.)
- Select 2 additional 300-400 level elective courses (6 cr.)
- Allied Science
  - BIOL-L 101 (4 cr.)
  - BIOL-L 102 (4 cr.)
  - CHEM-C 105 (3 cr.)
  - CHEM-C 106 (3 cr.)
  - CHEM-C 125 (2 cr.)
  - CHEM-C 126 (2 cr.)
  - Courses listed under the category Group IIIA at the 100 level or above (28 cr.) - Suggested courses include
    - BIOL-L 211 (3 cr.)
    - BIOL-L 311 (3-4 cr.)
    - BIOL-L 312 (x cr.)
    - BIOL-Z 374 (x cr.)
    - BIOL-Z 406 (3-4 cr.)
    - BIOL-M 310 (3-4 cr.)
    - BIOL-M 315 (2 cr.)
    - CHEM-C 341 (3 cr.)
    - CHEM-C 342 (3 cr.)
    - CHEM-C 343 (2 cr.)
    - CHEM-C 344 (2 cr.)
    - CHEM-C 483 (3 cr.)

- MATH-M 118 (3 cr.)
- MATH-M 119 (3 cr.)
- MATH-M 125 (3 cr.)
- MATH-M 126 (2 cr.)
  MATH-M 215 (5 cr.)
- MATH-M 216 (5 cr.)
   MATH-M 216 (5 cr.)
- MATH-M 301 (3 cr.)
- MATH-M 311 (4 cr.)
- MATH-M 312 (3 cr.)
- MATH-M 360 (3 cr.)
- MATH-M 366 (3 cr.)
- PHYS-P 201 (5cr.)
- PHYS-P 202 (5 cr.)
- PHYS-P 221 (5 cr.)
- PHYS-P 222 (5 cr.)

#### Total (64 cr.)

In addition to the preceding courses, the student is responsible for fulfilling the general requirements of the Bachelor of Science degree as established by the College of Arts and Sciences.

## Major in Psychology - B.A.

#### Requirements (30 cr.) including the following classes

- PSY-P 101 (3 cr.) prerequisites for all courses
- PSY-P 102 (3 cr.) prerequisites for all courses
- PSY-P 211 (3 cr.) prerequisites for all 400-level laboratory courses
- PSY-K 300 (3 cr.) prerequisites for all 400-level laboratory courses
- Area A
  - Select a minimum of 2 of the following
    - PSY-P 325 (3 cr.)
    - PSY-P 326 (3 cr.)
    - PSY-P 327 (3 cr.)
    - PSY-P 329 (3 cr.)
    - PSY-P 335 (3 cr.)
    - PSY-P 388 (3 cr.)
    - PSY-P 407 (3 cr.)
    - PSY-P 417 (3 cr.)
- Area B
  - Select a minimum of 2 of the following
    - PSY-P 303 (3 cr.)
    - PSY-P 314 (3 cr.)
    - PSY-P 316 (3 cr.)
    - PSY-P 319 (3 cr.)
    - PSY-P 320 (3 cr.)
    - PSY-P 324 (3 cr.)
    - PSY-P 336 (3 cr.)
    - PSY-P 389 (3 cr.)
    - PSY-P 425 (3 cr.)
    - PSY-P 430 (3 cr.)
- Select 1 from the following Advanced Laboratory Course which also satisfies the capstone requirement
  - PSY-P 421 (3 cr.)
  - PSY-P 424 (3 cr.)
  - PSY-P 429 (3 cr.)

- PSY-P 435 (3 cr.)
- 300-400 level elective (3 cr.)

#### Total (30 cr.)

Students must also complete the general requirements of the College of Arts and Sciences.

**Recommended** In addition to meeting departmental and general requirements, the department suggests that psychology majors take supporting courses in mathematics and the natural sciences. We recommend the following courses for all majors: Introductory Biology and Introductory Chemistry. It is also important to obtain a broadly based education in the humanities, social sciences, and fine arts. Students should not concentrate all their electives in psychology or any other single subject area. Courses such as logic, philosophy, sociology, chemistry, and computer science are especially appropriate. Prospective psychology students and/or majors are invited to discuss their interests with any member of the psychology faculty.

## Major in Psychology with a Concentration in Women's and Gender Studies

**Purpose** The Bachelor of Arts degree in psychology with a concentration in Women's and Gender Studies provides a solid background in applied and basic psychology along with a focus on and experiences in the psychology of women and women's issues.

#### Requirements (36 cr.) including the following classes

- PSY-P 101 (3 cr.) prerequisites for all courses
- PSY-P 102 (3 cr.) prerequisites for all courses
- PSY-P 211 (3 cr.) prerequisites for all 400-level laboratory courses
- PSY-K 300 (3 cr.) prerequisites for all 400-level laboratory courses
- Area A
  - Select a minimum of 1 of the following
    - PSY-P 325 (3 cr.)
    - PSY-P 326 (3 cr.)
    - PSY-P 327 (3 cr.)
    - PSY-P 329 (3 cr.)
    - PSY-P 335 (3 cr.)
    - PSY-P 388 (3 cr.)
    - PSY-P 407 (3 cr.)
    - PSY-P 417 (3 cr.)
- Area B
  - Select a minimum of 2 of the following
    - PSY-P 303 (3 cr.)
    - PSY-P 314 (3 cr.)
    - PSY-P 316 (3 cr.)
    - PSY-P 319 (3 cr.)
    - PSY-P 320 (3 cr.)
    - PSY-P 324 (3 cr.)
    - PSY-P 336 (3 cr.)
    - PSY-P 389 (3 cr.)
    - PSY-P 425 (3 cr.)
    - PSY-P 430 (3 cr.)

- Select 1 from the following Advanced Laboratory Courses which also satisfies the capstone requirement
  - PSY-P 421 (3 cr.)
  - PSY-P 424 (3 cr.)
  - PSY-P 429 (3 cr.)
  - PSY-P 435 (3 cr.)
- Select 2 Psychology courses focused on women's issues
  - PSY-P 460 (3 cr.)
  - PSY-P 432 (3 cr.)
- Select 1 Women's and Gender Studies core course
   WGS-W 200 (3 cr.)
  - WGS-W 200 (3 cr.)
    WGS-W 400 (3 cr.)
  - WGS-W 400 (3 cf.)
- Select 1 Practicum in Women's and Gender Studies of Psychology (if focus is on women's issues)
  - WGS-W 480 (3 cr.)
  - PSY-B 309 (3 cr.)

In addition to the preceding courses, the student is responsible for fulfilling the general requirements of the College of Arts and Sciences.

# Postbaccalaureate Certificate in Drug and Alcohol Counseling

The Postbaccalaureate Certificate in Drug and Alcohol Counseling is designed for individuals interested in entering the demanding and rewarding field of alcohol and drug abuse counseling, as well as individuals who already work in the general field of drug and alcohol treatment in order to gain accreditation and advance in their professions.

The program provides comprehensive classroom instruction and practical field experience needed to succeed in the field. The program recognizes that drug and alcohol addiction and treatment are complex topics driven by an array of biological, genetic, neural, psychological, social, and cultural forces. The classroom instruction is designed to provide students with a basic understanding of many of these forces, an array of drug and alcohol treatment procedures, theories of drug use and abuse, the addiction process and its mental health connections, pharmacology, core counselor functions, strategies for addressing addiction, and ethical considerations. The in-field training is designed to enable students to apply this information and to practice all the core counselor functions including screening, intake, assessment, treatment planning, counseling, case management, crisis intervention, client education, and record keeping.

#### Requirements - (27 cr.)

- Core Courses (9 cr.)
  - PSY-P 324
    - PSY-P 407
    - PSY-P 390 Special Topics in Psychology: Professional Issues in Addictions Counseling
- Practica (9 cr.)
  - PSY-B 309 (9 cr.)
- Electives (9 cr.)

- Select 3 from the following
  - PHIL-P 393
  - PSY-P 314
  - PSY-P 326
  - PSY-P 390
  - PSY-P 401
  - PSY-P 425
  - PSY-P 430
  - PSY-P 495
  - SOC-S 420

Total (27 cr.)

## **Minor in Psychology**

#### **Requirements**

Students who elect to minor in psychology must complete the following

- PSY-P 101 (3 cr.)
- PSY-P 102 (3 cr.)
- Select 3 additional courses in psychology for which the student has the prerequisites (9 cr.)

Total (15 cr.)

# **Sociology and Anthropology**

# Sociology

The Department of Sociology and Anthropology offers its sociology curriculum to undergraduate students who want to pursue the systematic study of society from the microlevel (the individual in society) to the macrolevel (the study of institutions). The department offers its anthropology curriculum to undergraduate students who want to acquire a global perspective on the nature and origins of human cultural and biological diversity; different anthropology courses can be used as natural science, social science, or humanities electives. At the junior / senior level, some students may be eligible to enroll in independent study courses: (1) Individual Readings in Sociology and Anthropology (2) the Internship Program (where the student integrates a work experience with course work). Students graduating with a major in sociology or anthropology may enter graduate programs in sociology, anthropology, and social science; enter professional schools, such as law and social work; or enter careers requiring a bachelor's degree in the liberal arts. Both Sociology and Anthropology majors are encouraged to draw upon the resources of other departments in social and behavioral sciences, as well as the humanities and physical/natural sciences. Counseling on programs and career choices is available within the department.

The Department of Sociology and Anthropology maintains a chapter of Alpha Kappa Delta International Sociology Honor Society (lota of Indiana Chapter). Students are selected on the basis of excellence in research.

#### Major in Sociology Four-year Program Requirements - Majors (30 cr.)

- SOC S161 (3 cr.)
- SOC S215 (3 cr.)

- SOC S230 (3 cr.)
- SOC S261 (3 cr.)
- SOC S262 Methods (3 cr.) (quantitative)
- Select one course in deviance or in inequality from the following
  - SOC \$310 (3 cr.)
  - SOC S317 (3 cr.)
  - SOC S320 (3 cr.)
  - SOC S325 (3 cr.)
  - SOC S328 (3 cr.)
  - SOC S331 (3 cr.)
  - SOC S335 (3 cr.)
  - SOC S337 (3 cr.)
  - SOC S420 (3 cr.)
- Select one course in organization or in communication from the following
  - SOC S309 (3 cr.)
  - SOC S311 (3 cr.)
  - SOC S313 (3 cr.)
  - SOC S314 (3 cr.)
  - SOC S315 (3 cr.)
  - SOC S316 (3 cr.)
  - SOC S410 (3 cr.)
  - SOC S416 (3 cr.)
  - SOC S418 (3 cr.)
  - SOC S419 (3 cr.)
  - SOC S431 (3 cr.)
  - SOC S447 (3 cr.)
- SOC S340 (3 cr.) capstone requirement
- Select any two additional sociology courses to include (6 cr.)
  - 300 or 400 level course

Courses in the major cannot be used to satisfy Group III distribution.

Students must also complete the general requirements of the College of Arts and Sciences.

#### **Emphasis Areas for Sociology Majors**

With careful planning, students may be able to select courses that concentrate in one of two general emphasis areas:

The **Sociology** emphasis would include SOC S262, SOC S340, and additional courses that emphasize a theme such as:

- deviance or inequality including
  - several courses from above section as electives
- social organization including
  - several courses from above section as electives
- medical sociology including
  - SOC S314 (3 cr.)
  - SOC S331 (3 cr.)
  - SOC S362 Medical Anthropology (3 cr.)
- gender including courses such as
  - SOC S164 (3 cr.)
  - SOC S310 (3 cr.)

- SOC S337 (3 cr.)
- topics courses on gender (3 cr.)
- · family studies including courses such as
  - SOC S164 (3 cr.)
  - SOC S316 (3 cr.)
  - SOC S416 (3 cr.)
- social movements including courses such as
  - SOC S218 (3 cr.)
  - SOC S311 (3 cr.)
  - SOC S418 (3 cr.)
  - SOC S419 (3 cr.)
- qualitative / ethnographic methods
  - Select one or both of the following
  - SOC S254 (3 cr.)
    - SOC S262 (3 cr.)
  - SOC S431 (3 cr.)
    - Select one or both of the following
      - SOC S441 (3 cr.)
      - SOC S340 (3 cr.)

#### Total (30 cr.)

# Major in Sociology with Concentration in Women's and Gender Studies

#### Requirements - Majors (30 cr.)

- Select four Basic Sociology courses
  - SOC S161 (3 cr.)
  - SOC S215 (3 cr.)
  - SOC S230 (3 cr.)
  - SOC S261 (3 cr.)
- SOC S262 Methods (3 cr.)
- Select one course from the following Deviance/Inequality courses
  - SOC S337 Women and Crime (3 cr.)
  - SOC S420 Topics in Deviance, when topic is women, such as Women and Deviance (3 cr.)
- Select one course from the following Organization courses
  - SOC S310 Sociology of Women in America (3 cr.)
  - SOC S410 Topics in Social Organization when topic is women, such as Women and Religion (3 cr.)
- Select one course from the following Theory courses
  - SOC S340 SOC (3 cr.)
  - SOC S441 Topics in Theory, Anthropology (3 cr.)
- Select electives in areas of Sociology / Anthropology Women's and Gender Studies
  - Select two appropriate courses at the 300-400 level such as
    - SOC S337 (3 cr.)
    - SOC S420 (3 cr.)
    - SOC S310 (3 cr.)
    - SOC S410 (3 cr.)
    - SOC S495 Individual Readings and Research when topic is women (3 cr.)

- SOC S398 Internship in Behavioral Sciences, when agency serves women, such as battered women's shelters, women's transitional houses, etc. (3 cr.)
  - SOC S362 Native American Women (3 cr.)

Total (30 cr.)

#### **Outside Electives**

- WOST 200 Introduction to Women's and Gender Studies (3 cr.)
- Select one WOST W400 course from the following
  - P460 / W400 Psychology of Women (3 cr.)
  - P432 / W400 Women and Madness (3 cr.)
  - Appropriate cross-listed courses from other disciplines (3 cr.)

Students must also complete all the requirements for the regular B.A. in Sociology and College of Arts and Sciences B.A. general requirements.

#### Minor in Sociology

Requirements - Minors (15 cr.)

- SOC S161 (3 cr.)
- Select one from the following
  - SOC S163 (3 cr.)
  - SOC S164 (3 cr.)
  - SOC S230 (3 cr.)
- Select two 300 or 400 level sociology courses (6 cr.)

Students pursuing a minor may wish to select courses that emphasize a theme such as

- · deviance or inequality including
  - two or three courses from the above sections
- social organization including
  - several courses from above section as electives
- medical sociology including
  - SOC S314 (3 cr.)
  - SOC S331 (3 cr.)
- gender including two or three from
  - SOC S164 (3 cr.)
  - SOC S310 (3 cr.)
  - SOC S337 (3 cr.)
  - topics courses on gender (3 cr.)
- family studies including two or three from
  - SOC S164 (3 cr.)
  - SOC S316 (3 cr.)
  - SOC S416 (3 cr.)
- social movements including two or three from
  - SOC S218 (3 cr.)
  - SOC S311 (3 cr.)
  - SOC S418 (3 cr.)
  - SOC S419 (3 cr.)

Total (15 cr.)

# Anthropology

Anthropology gives students a holistic understanding of human existence in an ecological, evolutionary perspective. It studies the interrelationships of human biology and human behavior, particularly that behavior which we call culture, both in the past and in the present. In its four traditional subfields of cultural anthropology, physical anthropology, archaeology, and linguistics, anthropology covers all the aspects of being human, making use of almost all of human knowledge. Anthropology is also the only discipline that focuses on the study of the origin and nature of human biological and cultural diversity. Courses in anthropology are thus of value to students in virtually all fields; they relate those disciplines to a broader view of humankind as a whole.

#### **Recommended first courses**

- Select one of the following as a first course in anthropology
  - ANTH A104 (3 cr.)
  - ANTH A105 (3 cr.)

#### Major in Anthropology

Indiana University Northwest offers a joint B.A. Major in Anthropology in conjunction with Indiana University South Bend. The required classes are taught at both schools, so students can complete entirely at either campus. There is no requirement that students must take classes at both schools. At the same time, the faculty of each campus do have different specializations and offer different elective courses. Additionally the required classes may be offered in different semesters at the campuses. Students are free to take classes at both schools and apply them to the major.

#### Requirements - Majors (33 cr.)

- Select 1 of the following introductory anthropology courses
  - ANTH A104 (3 cr.)
  - Select 1 of the followingANTH A105 (3 cr.)
- E200 Cultural Anthro II (3 cr.)
- Select 1 each from at least two of these pairs
   ANTH P200 / ANTH P400 Pigenthropology
  - ANTH B200 / ANTH B400 Bioanthropology (3 cr.)
  - ANTH L200 / ANTH L300 Language and Culture (3 cr.)
  - ANTH P200 / ANTH E400 Archaeology (3 cr.)
- Select 1 of the following Quantitative Methods • SOC S262 (3 cr.)
- ANTH A360 capstone requirement (3 cr.)
- Select 1 400-level Seminar Experience course such as
  - ANTH E400 (3 cr.)
  - ANTH E445 (3 cr.)
  - ANTH B400 (3 cr.)
  - ANTH B466 (3 cr.)
  - Or others to be offered
- Select any 3 elective courses in Anthropology (9 cr.)

- Any course can fulfill only one of the requirements listed above
- 15 credit hours of the courses taken in the major must be at the 300 level

Total (33 cr.)

#### Minor in Anthropology

Requirements - Minor (15 cr.) Select 5 (3 cr.) courses including

- ANTH-A 104 (3 cr.)
- ANTH-A 105 (3 cr.)
- Select at least 1 course from the following:
  - ANTH-B 200 (3 cr.)
  - ANTH-E 200 (3 cr.)
  - ANTH-L 200 (3 cr.) / ANTH-L 300 (3 cr.)
  - ANTH-P 200 (3 cr.)
- Select at least one 300- or 400- level course in addition to any used to satisfy the above requirements. (3 cr.)

# **Women's and Gender Studies**

# About the Women's and Gender Studies Program

Women's and Gender Studies is an interdisciplinary program focusing on the importance of gender as a category of social analysis. Women's and Gender Studies courses consider gender systems across cultures, examining the way those systems develop, function, and change. Women's and Gender Studies draws upon a variety of academic disciplines.

A Women's Studies minor, Certificate in Women's and Gender Studies, or Bachelor of Arts degree with a major in Psychology or Sociology and a concentration in Women's and Gender Studies provides a valuable foundation for students entering the workforce. Women's and Gender Studies courses will benefit those who enter jobs in business, education, nursing, and public affairs, as well as those who study traditional fields such as history, sociology, psychology, the arts, and literature. Most of the courses in the program satisfy distribution requirements.

# **Minor in Women's Studies**

### Requirements - (15 cr.)

- Core Courses (6 cr.)
  - Select one of the following
    - WGS-W 200 Women in American Society (3 cr.) Social Sciences
    - WGS-W 201 Women in American Culture (3 cr.) Humanities
  - Select one of the following
    - WGS-W 400 Topics in Women's and Gender Studies (3 cr.) Social Sciences
    - WGS-W 401 Topics in Women's and Gender Studies (3 cr.) Humanities
- Women in Diverse Cultures (3 cr.)
  - WGS-W 301 International Perspectives on Women (3 cr.)

- AFRO-A 210 Black Women in the Diaspora (3 cr.)
- AFRO-A 406 Literature by American Women of Color (3 cr.)
- AFRO-A 410 The Black Woman and the Afro-American Experience (3 cr.)
- CHRI-C 490 Topic: The Latino Woman (3 cr.)
- CMLT-C 340 Women in World Literature (3 cr.)
- SPAN-S 284 Women in Hispanic Culture (3 cr.)
- SPAN-S 470 Women in Hispanic Literature (3 cr.)
- Women in the Social Sciences (3 cr.)
  - WGS-W 221 Native Uses of Herbs (3 cr.)
  - WGS-W 480 Women's and Gender Studies Practicum (3 cr.)
  - AFRO-A 210 Black Women in the Diaspora (3 cr.)
  - AFRO-A 410 The Black Woman and the Afro-American Experience (3 cr.)
  - ANTH-E 221 Native Uses of Herbs (1 cr.)
  - CHRI-C 490 Topic: The Latino Woman (3 cr.)
  - SPAN-S 470 Women in Hispanic Literature (3 cr.)
  - LSTU-L 210 Workplace Discrimination and Fair Employment (3 cr.)
  - LSTU-L 290 Topics in Labor Studies (1-3 cr.) LSTU L390 Women and Work (1-3 cr.)
  - LSTU-L 385 Race, Class, Gender, and Work (3 cr.)
  - PSY-P 432 Women and Madness (3 cr.)
  - PSY-P 460 Women: A Psychological Perspective (3 cr.)
  - SOC-S 310 The Sociology of Women in America (3 cr.)
  - SOC-S 337 Women and Crime (3 cr.)
  - SOC-S 431 Women, Religion, and Spirituality (3 cr.)
  - SPCH-S 450 Gender and Communication (3 cr.)
- Women in the Humanities (3 cr.)
  - WGS-W 207 Women in Literature (3 cr.)
  - WGS-W 301 International Perspectives on Women (3 cr.)
  - AFRO-A 406 Literature by American Women of Color (3 cr.)
  - CMLT-C 340 Women in World Literature (3 cr.)
  - ENG-L 201 Films by Women (3 cr.)
  - ENG-L 207 Women in Literature (3 cr.)
  - ENG-L 295 American Film Culture (3 cr.) (When topic is women)
  - ENG-L 381 Recent Writing (3 cr.) (When topic is women)
  - ENG-L 440 Seminar in English and America Literature (3 cr.) (When topic is women)
  - SPAN-S 470 Women in Hispanic Literature (3 cr.)
  - HIST-H 260 / HIST-H 425 History of Women in the U.S. (3 cr.) (Colonial to Nineteenth Century)
  - HIST-H 262 / HIST-H 425 American Women's History: Twentieth Century

Total (15 cr.)

The course taken to fulfill the requirement of Women in Diverse Cultures cannot be used to fulfill the requirements in Women in the Social Sciences and Women in the Humanities.

# Certificate in Women's and Gender Studies

The Certificate offers students a focused program in an interdisciplinary course of studies dealing with women's experiences, issues related to gender, gender identity, roles and relationships, and the impact of these elements on life and society. The Certificate is open to both degree-seeking and non-degree-seeking students. Many professionals in business, psychology, social services, medical, and legal professions find that training in Women's and Gender Studies enhances the practice of their profession.

Students may enter the program in two different ways. Degree-seeking and non-degree-seeking students should contact the WGS Director. They will then discuss the student's career goals and needs and select a set of courses that will best satisfy those goals. Degree-seeking students should be in good standing within the university and have a minimum GPA of 2.0.

#### Requirements - (18 cr.)

- Core Courses (6 cr.)
  - Select courses across 3 categories (12 cr.)
    - Women in Diverse Cultures (3 cr.)
    - Women in the Social Sciences (3 cr.)
    - Women in the Humanities (3 cr.)
- At least 9 credit hours of the certificate must be completed on the Indiana University Northwest campus.
- Students are required to obtain a grade of C or better for all courses used in the Certificate.
- Students may receive either a minor or Certificate in Women's and Gender Studies, but not both.

#### Bachelor of Arts in Psychology - Concentration in Women's and Gender Studies Purpose

The Bachelor of Arts degree in psychology with a concentration in Women's and Gender Studies provides a solid background in applied and basic psychology along with a focus on and experiences in the psychology of women and women's issues.

#### Requirements (36 cr.) including the following classes

- PSY-P 101 (3 cr.) prerequisites for all courses
- PSY-P 102 (3 cr.) prerequisites for all courses
- PSY-P 211 (3 cr.) prerequisites for all 400-level laboratory courses
- PSY-K 300 (3 cr.) prerequisites for all 400-level laboratory courses
- Area A
  - Select a minimum of 2 of the following
    - PSY-P 325 (3 cr.)
    - PSY-P 326 (3 cr.)

- PSY-P 327 (3 cr.)
- PSY-P 329 (3 cr.)
- PSY-P 335 (3 cr.)
- PSY-P 407 (3 cr.)
- PSY-P 417 (3 cr.)
- Area B
  - Select a minimum of 2 of the following
    - PSY-P 314 (3 cr.)
    - PSY-P 316 (3 cr.)
    - PSY-P 319 (3 cr.)
    - PSY-P 320 (3 cr.)
    - PSY-P 324 (3 cr.)
    - PSY-P 336 (3 cr.)
    - PSY-P 389 (3 cr.)
    - PSY-P 425 (3 cr.)
    - PSY-P 430 (3 cr.)
- Select 1 from the following Advanced Laboratory Courses which also satisfies the capstone requirement
  - PSY-P 421 (3 cr.)
  - PSY-P 424 (3 cr.)
  - PSY-P 429 (3 cr.)
  - PSY-P 435 (3 cr.)
- Select two psychology courses focused on women's issues
  - PSY-P 460 (3 cr.)
  - PSY-P 432 (3 cr.)
- Select one Women's and Gender Studies core course from the following
  - WGS-W 200 (3 cr.)
  - WGS-W 400 (3 cr.)
- Select one practicum in Women's and Gender Studies or psychology from the following
  - WGS-W 480 (3 cr.)
  - PSY-B 309 (3 cr.)(if focus is on women's issues)

#### Total (36 cr.)

In addition to the preceding courses, the student is responsible for fulfilling the general requirements of the B.A. degree as established by the College of Arts and Sciences.

## Bachelor of Arts in Sociology -Concentration in Women's and Gender Studies

The Bachelor of Arts degree in sociology with a concentration in Women's and Gender Studies provides a solid background in sociology along with a focus on and experiences in the sociology of women and women's issues.

#### Requirements - (30 cr.)

- SOC S161
- SOC S215
- SOC S230
- SOC S261
- Select one Methods course from the following

- SOC-S 262
- SOC-S 254
- Select one Deviance / Inequality course from the following
  - SOC-S 337 Women and Crime
  - SOC-S 420 Topics in Deviance (when topic is women, such as Women and Deviance)
- Select one Organization course from the following
   SOC-S 310 Sociology of Women in America
  - SOC-S 410 Topics in Social Organization (when topic is women, such as Women and Religion)
- Select one Theory course from the following
  - SOC-S 340
  - SOC-S 441 Topics in Theory, Anthropology
- Select elective courses in areas of sociology / anthropology / Women's and Gender Studies
  - Select two appropriate additional courses at the 300-400 level from the following
    - SOC S337
    - SOC S420
    - SOC S310
    - SOC S410
    - and / or any of S495 Individual Readings and Research when topic is women
    - S398 Internship in Behavioral Sciences, when agency serves women, such as battered women's shelters, women's transitional houses, etc.
    - S362 Native American Women

#### Total (30 cr.)

#### **Outside Electives**

- WGS-W 200 Introduction to Women's and Gender Studies
- Select one WGS-W 400 course such as
  - PSY-P 460 / WGS-W 400 Psychology of Women
  - PSY-P 432 / WGS-W 400 Women and Madness
  - Appropriate cross-listed courses from other disciplines

#### Total (30 cr.)

In addition to the preceding courses, the student is responsible for fulfilling the general requirements of the B.A. degree as established by the College of Arts and Sciences.

# Graduate

### Administrative Officers

Mark S. Hoyert, Ph.D., Dean

Nelson H. De Leon, Ph.D., Associate Dean Diane Robinson Sandidge, MPA, Assistant to the Dean Bob Mucci, Ph.D., Director of MLS Program Mary Ann Fischer, Ph.D. Chair, Department of Psychology

#### Website: www.iun.edu/~artsci/

#### Phone: (219) 980-6789

#### **Overview**

The College of Arts and Sciences offers two Masters degree programs: a Master of Liberal Studies (M.L.S.) and a Master of Science in Clinical Counseling with a Specialization in Drug and Alcohol Counseling (M.S.C.C.).

#### Master of Science in Clinical Counseling with Specialization in Drug and Alcohol Counseling

The Master of Science in Clinical Counseling with Specialization in Drug and Alcohol Counseling (M.S.C.C.) program is designed for students who wish to prepare for careers and licensure in the field of addictions treatment. Drug and alcohol addictions remain one of the most vexing problems facing the region, the state, and society in general. The extent of addiction is horrific. Substance abuse is the nation's number one health problem. One in ten adult in the U.S. is currently addicted to alcohol or drugs and almost one-third of all adults will struggle with addictions at some point in their lives. While addictions are powerful and can have harmful consequences, they respond well to treatment. Unfortunately, there exists a shortage of therapists who are prepared with graduate-level knowledge and skills in addictions treatment. The M.S.C.C. Program is designed to provide this background. Students will gain basic knowledge about pharmacology, abnormal psychology, theories of addictions, and treatment options. Students will develop and practice counseling skills and learn how to evaluate treatment methods and techniques. Graduates will be able to work in this rewarding field and will be able to pursue licensure.

#### **Master of Liberal Studies**

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 curious 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.

#### **Policies and Procedures**

The general regulations and policies detailed in this bulletin apply to all students in the college's graduate and post-baccalaureate programs.

#### **General Scholarship Rule**

Any student who does not possess the necessary preliminary training or who lacks other qualifications may be required by the college to enroll in such courses designated by the college or other corrective actions as is necessary or desirable. The college may review a student's record at any time and take whatever actions seem necessary for the best interest of that student or the college. Any student whose work is unsatisfactory or whose conduct is unethical may be dismissed from the college.

#### **Academic Regulations**

Students must have their programs of study approved by the program director.

Courses at the 300 or 400 level that are available to be taken for graduate credit as a graduate level class will include additional assignments beyond those required for undergraduate credit. Enrollment in such courses requires the approval of the instructor and of the program director. It is sometimes possible for a student to take a graduate level course at IUN or elsewhere that can count as an elective in the graduate program; permission for this must be given by the program director before the student registers. Students who have graduate course credits before they enroll in one of the graduate programs may have some credits transferred into the program, but such transfers of credits will not be considered until the student has demonstrated satisfactory progress in their current program. Courses used for another degree or certificate cannot also be used to satisfy graduate program requirements.

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. Students whose GPA falls below 3.0 are considered to be on probation; they must earn at least a B- in each of their next two classes with a 3.0 GPA in those two classes in order to continue in the program. Other academic regulations and policies are established by the Graduate Studies Committees of the College of Arts and Sciences. Students should consult their program director for further information.

# Master of Science in Clinical Counseling

#### Admission

Students are admitted to the Master of Clinical Counseling program by the MSCC Admissions Committee of the Psychology Department. To be considered for admission, students must hold a bachelor's degree from an accredited institution and an undergraduate grade point average of at least 3.0. GRE scores are recommended. If the applicant is a recovering substance abuser, two years of continuous sobriety is strongly recommended. Students with a GPA slightly below 3.0 for a recent degree, or students with a slightly lower GPA who are returning to college with relevant work experience in a health or human services agency may be admitted on probation. Students admitted on probation must earn at least a B- in each of their first two classes and must maintain a GPA of 3.0 in order to continue in the program. The goal is to select applicants who can successfully complete graduate study and work successfully in the field of addictions counseling.

#### Curriculum

A. Drug and Alcohol Addictions Counseling Core Courses-(12 cr.)

- Psychology P535 Introduction to Addictions Counseling (3 cr.)
- Psychology P510 Principles of Research in Psychology (3 cr.)
- Psychology P667 Neuropsychopharmacology (3 cr.)
- Psychology P624 Principles of Psychopathology (3 cr.)

B. Practica - must complete 9 credit hours

 Psychology - P691 Practicum in Applied Psychology. Experience in psychology-oriented work settings. Students will work with mental health and social service providers whose primary mission is drug and alcohol addictions treatment.

C. Electives - must complete 15 credit hours

- Psychology P631 Intervention and Evaluation
- Psychology P634 Advanced Survey of Community Psychology
- Psychology P641 Assessment
- Psychology P898 Master's Degree Research
- Philosophy P694 Biomedical Ethics
- SPEA H505 Health Program Design, Implementation, and Evaluation

# **Master of Liberal Studies**

#### Admission

Students are admitted to the Master of Liberal Studies program by the M.L.S. 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. Students with a GPA slightly below 3.0 for a recent degree may be admitted on probation, as well as students with a lower GPA who are returning to college after a long absence with a fresh motivation to learn. Students admitted on probation must earn at least a B- in each of their first two classes with a 3.0 GPA in order to continue in the program. The goal is to select applicants who can successfully complete graduate study and for whom the MLS program will prove to be enriching.

#### Academic Curriculum

The M.L.S. requires the completion of at least 11 courses (minimum of 33 credits). Early in their programs, students take a proseminar as introduction to graduate liberal studies and interdisciplinary methodology, and at least three core seminars, one each 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. If the student chooses, the program can culminate with a thesis or alternative project that will grow out of the information and methodologies acquired throughout the course work.

#### **Proseminar (required)**

LIBS D510 Introduction to Graduate Liberal Studies (3 cr.)

#### Core Seminars (all three required)

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. Students may repeat core seminars (each may be taken up to two more times with a different topic).

- LIBS D501 Humanities Seminar Core Seminar (3 cr.)
- LIBS D502 Social Sciences Seminar Core Seminar (3 cr.)
- LIBS D503 Science Seminar Core Seminar (3 cr.)

#### Electives (no specific requirements)

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.

- LIBS D511 M.L.S. Humanities Elective (3 cr.) may each be repeated (with different topics) as many times as needed to complete the students' goals
- LIBS D512 M.L.S. Social Science Elective (3 cr.) may each be repeated (with different topics) as many times as needed to complete the students' goals
- LIBS D513 M.L.S. Science Elective (3 cr.) may each be repeated (with different topics) as many times as needed to complete the students' goals
- LIBS D514 Graduate Liberal Studies Overseas Study (max 6 cr.)
- LIBS D594 Liberal Studies Directed Readings (max 6 cr.)
- LIBS D596 Liberal Studies Independent Research (max 6 cr.)
  - M.L.S. students may take no more than a total of 6 credit hours of D594 and D596 combined.
- LIBS D501 Humanities Seminar Core Seminar (3 cr.)
- LIBS D502 Social Sciences Seminar Core Seminar (3 cr.)
- LIBS D503 Science Seminar Core Seminar (3 cr.)

# Thesis Option: Independent Research / Creative Activity

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.

Requirement

- LIBS D601 M.L.S. Project Proposal Seminar (3 cr.)
- LIBS D602 Graduate Project (3-6 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.

#### Requirement

• LIBS D600 Public Intellectual Practicum (3 cr.)

#### **Postbaccalaureate Certificates**

The College of Arts and Sciences offers postbaccalaureate certificates in four areas: Community Development and Urban Studies (contact Department of Minority Studies at 219-980-6629), Computer Information Systems (contact Department of Computer Information Systems at 219-980-6638), Drug and Alcohol Counseling (contact Department of Psychology at 219-980-6680), and Race-Ethnic Studies (contact Department of Minority Studies at 219-980--6629). The certificates are designed for mature students seeking career changes, career development, or lifelong learning objectives. The postbaccalaureate certificate options are open to anyone holding a bachelor's degree from an accredited college or university. Students will receive instructions in the major certificate subject area and selected courses in Arts and Sciences related areas.

The complete range of academic counseling, career counseling, and placement services are available to postbaccalaureate certificate students (consult the *IU Northwest Undergraduate Bulletin* for details)

# **English Graduate Coursework**

The selection of courses for graduate programs in English at Indiana University Northwest must be done with departmental graduate counselors in the School of Education.