College of Arts and Sciences Bulletin 2024-26

Administrative Officers

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Web site: www.northwest.iu.edu/coas

Telephone: (219) 980-6729

Overview

Mission

At the heart of IU Northwest is the College of Arts and Sciences. We provide undergraduate and graduate education in a broad range of arts and sciences disciplines that prepare students for rewarding careers of their choice. We also provide the academic coursework that is the foundation for success in majors across the university. The college is dedicated to helping our students develop the communication, reasoning, and analytic skills necessary to succeed in a rapidly changing world. The skills and content offered in the college are the core of what it means to be educated in the 21st Century. We invite all of our students to delve into the vast offerings of the College with the expectation that expanding your knowledge of the liberal arts and sciences will lead to better lives and more successful and fulfilling careers.

At the core of our programs, many unique to the region, are the analytical, cognitive, and expressive skills 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 arts and sciences 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 11 departments and one school offering baccalaureate degrees in the following areas: Actuarial Science, African American and African Diaspora Studies, Anthropology, Applied

Science, Applied Statistics, Biology, Biochemistry, Chemistry, Communication, Computer Information Systems, Computer Science, Data Science, Digital Media and Storytelling, Economics, English, Fine Arts, French, General Studies, Geology, History, Informatics, Mathematics, Neuroscience, Philosophy, Political Science, Psychology, Sociology, Spanish, Sustainability, and Theatre. Courses are offered in all those fields plus Astronomy, Canadian Studies, Comparative Literature, Geography, Journalism, Latino Studies, Linguistics, Music, Physics, Religious Studies, Telecommunications, and Women's and Gender Studies.

The College offers interdepartmental majors that lead to baccalaureate degrees in Graphic Design, Environmental Science, and Computer Information Systems and Mathematics as well.

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 the College of Health and Human Services, the School of Business and Economics and the School of Education with courses that are a foundation for those professional programs.

Postbaccalaureate certificates are offered in Computer Information Systems, Community Development and Urban Studies, and Race-Ethnic Studies 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, a Master of Science in Computer Information Systems, an Master of Science in Actuarial Science, a Master of Arts in English, History, and Political Science. The college offers a series of Graduate Certificates and Masters of Arts for Teachers primarily for high school teachers who want or need additional education in particular fields. These include: Graduate certificates in Biology, Chemistry, English, History, Mathematics, Political Science, and Spanish. The College offers a Master of Arts for Teachers in Biology, Chemistry, French, History, Mathematics, and Political Science.

Contact Information

College of Arts and Sciences IU Northwest Hawthorn Hall, Room 225 3400 Broadway Gary, Indiana 46408 (219) 980-6729

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

Accreditation

The undergraduate and graduate degree offerings of the College of Arts and Sciences are accredited by the Higher Learning Commission on the Open Pathway.

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 and its faculty members can advise students about graduate school and career opportunities. Information and advising regarding preprofessional programs is available in a seperate section of the COAS bulletin.

Undergraduate

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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 Academic Advising Report (AAR) electronic system.

Baccalaureate Degrees

Professional and faculty advisors 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. Under these specific circumstances, the credit hour minimum can be no lower than 86 credit hours. 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 other divisions in the university.
- Minimum cumulative grade point average of 2.0.
- Minimum of 3 COAS Intensive Writing courses totalling at least 9 credit hours for the B.A. and the B.F.A. degrees For all other degrees a minimum of 2 COAS Intensive Writing courses totaling at least 6 credit hours are required. (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.)
- 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.
- 15-20 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.
- 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.
- To meet Intensive Writing, IIIA Lab, or IIIC Lab requirements, IU Northwest COAS students must complete classes and sections offered through IU Northwest and authorized by the College as an IW, IIIA Lab, or IIIC Lab. These designations will appear under the classes in the schedule of classes. For example, if a particular upper level history class is offered by IU Northwest and indicates that it carries IW credit, that class section will carry IW credit. If a second section of the same class is offered from either IU Northwest or through a different campus

- and it is not identified as carrying IW credit, then none will be assigned.
- 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.
- 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.

Goals of the Curriculum

A well-rounded college graduate must have knowledge and skills that span a variety of fields. For this reason, the requirements for IU Northwest's Arts and Sciences degrees are designed to expose students to a broad range of subjects and methods. The four groups of requirements promote the development of foundational skills, breadth of knowledge, and appreciation for diversity.

Group I: Foundation Courses: English, Mathematics, Public Speaking, and First Year Seminar

Successful graduates must express themselves clearly and effectively in English. They must be able to write documents and deliver presentations that display logical organization, proper grammar, and appropriate word choices. Thus, all College of Arts and Sciences students are required to complete both an English and a Public Speaking requirement.

Students must also cultivate a set of basic mathematical skills. These are essential for logical reasoning and have wide applications in a variety of fields of study. The Mathematics requirement ensures that all students develop their quantitative skills and learn to interpret—and draw conclusions from—data presented in tables and graphs.

The first year seminar considers interesting topics and helps students make the transition from high school, or community college to college.

Group II: Foreign Languages

Learning a foreign language increases the effectiveness of cross-cultural communication. It connects students with the world in ways that are not always available locally. The Foreign Language requirement for Bachelor of Arts degrees is designed to give each student a working

knowledge of a second language. The benefits are not only cultural but also practical: knowledge of a foreign language is a vital skill for those who pursue careers in business, education, social services, health care, government, and many other fields.

Group IIIA, Mathematics and Physical/Life Sciences

Courses in this group train students in the use of the scientific method. They expose learners to forms of inquiry that rely on observation, measurement, and the rigorous experimental testing of hypotheses. Typical Group IIIA disciplines include, but are not limited to, Anthropology, Astronomy, Biology, Chemistry, Computer Science, Geology, Mathematics, Neuroscience, Psychology, and Physics.

Since learning an experimental science is not just a theoretical, but also a practical endeavor, students must take at least one course that includes a laboratory experience.

Group IIIB, Social and Behavioral Sciences

The social and behavioral sciences focus on the systematic and objective study of human behavior and social institutions. These disciplines apply rigorous methods to the observation and analysis of a broad range of human activities and interactions. Group IIIB includes courses in disciplines such as African-American and African Diaspora Studies, Anthropology, Communication, Geography, Political Science, Psychology, Sociology, and Women's and Gender Studies.

Group IIIC. Humanities

Courses in the humanities help students reflect on the complexity of the human experience, appreciate the range of human thought and emotion, learn about aesthetic expression across artistic fields, and grapple with moral issues. Such courses focus on language, literature, history, art, theater, religion, philosophy, and related fields. The approach may be comparative, historical, or analytical, but the emphasis is always on strengthening the students' interpretive, critical, and writing skills.

Since the development of creativity is an essential component of the humanities, students must take at least one Group IIIC course that incorporates a laboratory experience.

Group IV: Diversity

An appreciation for the value of diversity is one of the essential qualities of an educated person. The Group IV requirements are designed to help students deepen their understanding of how diversity contributes to the cultural, social, and intellectual growth of individuals and societies.

Group IVA: History

Students working towards a Bachelor of Arts degree are required to take at least one history course chosen from a set that includes U. S. History, Western Civilization, and World History. The goal of the requirement is to help students place important events in their proper historical context and appreciate the many ways in which the past still shapes our present decisions, institutions, and ways of life.

Group IVB: Racial Minority Experience in the United States

The goal of this requirement is to expand our students' understanding of the many racial, linguistic, cultural, and ethnic diversities that exist in the United States. In addition to their primary focus on a racial minority experience in the United States, courses in this group have a secondary focus on cultural histories, injustice, and the interconnectedness of communities.

Group IVC. Additional Diversities (social class, language, religion, gender, sexual orientation, age, disabilities, nonwestern culture)

Students pursuing a Bachelor of Arts degree are also required to explore diversity from the perspective of social class, religion, gender, sexuality, age, or ability. Group IVC courses focus on special populations and communities, exploring their complex relationship with—and contributions to—society at large.

Academic Forgiveness Policy

Undergraduate students who have not attended any IU campus for at least two years, are pursuing their first bachelor's degree, and are enrolling at IU Northwest for the fall semester 2012, or later, may request academic renewal. Renewal means that all grades earned during the term(s) in question will not be counted in the calculation of the program GPA. The grades will remain on the student's official transcript. This policy will affect only the student's College of Arts and Sciences record. Academic renewal may be requested for no more than two terms of IU coursework, consecutive or not. Two consecutive summer sessions may be considered a single academic term for purposes of this policy. The petition must be submitted within the first two semesters after the two year hiatus.

Students may petition the COAS office to request application of the Academic Renewal Policy. Students may apply for renewal in anticipation of entering COAS if they otherwise fit the guidelines. Students will need to provide evidence that would indicate a significant change in their ability to succeed in academic work. A semester of good grades after the hiatus and before the petition can constitute such evidence. Reevaluation of fundamental skills may be required by the Dean before the student can proceed.

Academic renewal may be invoked only once in a student's academic career. Academic renewal is inapplicable to any grades issued as a result of academic dishonesty. The original grades earned by the student will remain on a student's academic record (official and unofficial transcripts), but the GPA and hours earned calculations will be adjusted appropriately in the Program statistics. Academic renewal does not change the Indiana University earned hours or GPA calculations. Academic renewal is IUN and COAS specific. Semesters forgiven at IU Northwest need not be forgiven at any other IU campuses (nor by another IUN college, school, or division).

List of Degrees and Programs Offered

Bachelor of Arts Degrees

African-American and African Diaspora Studies

Anthropology

Biology

Biochemistry

Chemistry

Communication

English

Fine Arts

French

Geology

History

Mathematics

Neuroscience

Philosophy

Political Science

Psychology

Sociology

Sustainability

Spanish

Theatre - currently not accepting students

Bachelor of Science Degrees

Actuarial Science

Applied Statistics

Biology

Biochemistry

Chemistry

Computer Information Systems

Computer Science

Data Science

Digital Media and Storytelling

French

Geology

Informatics

Mathematics

Neuroscience

Psychology

Spanish

Interdepartmental Majors

CIS and Mathematics

Environmental Science (Biology, Chemistry, Geology) Graphic Design (CIS and Fine Arts)

Bachelor of General Studies

Bachelor of Applied Science

Post-Baccalaureate Certificates

Community Development/Urban Studies

Computer Information Systems

Race-Ethnic Studies

Women's and Gender Studies

Graduate Certificates

Graduate Certificate in Biology

Graduate Certificate in Chemistry

Graduate Certificate in Composition Studies

Graduate Certificate in Language and Literature

Graduate Certificate in Literature

Graduate Certificate in Communication Studies

Graduate Certificate in Computer Science

Graduate Certificate in History

Graduate Certificate in Mathematics

Graduate Certificate in Political Science

Graduate Certificate in Spanish

Masters Degrees

Master of Liberal Studies

Master of Science in Actuarial Science

Master of Science in Computer Information Systems

Master of Arts in English Master of Arts in History

Master of Arts in Political Science

Master of Arts for Teachers in Biology Master of Arts for Teachers in Chemistry

Master of Arts for Teachers in Computer Science

Master of Arts for Teachers in French Master of Arts for Teachers in History

Master of Arts for Teachers in in Mathematics

Master of Arts for Teachers in Political Science

Minors

African-American and African Diaspora Studies

Anthropology

Biology

Biochemistry

Canadian Studies

Chemistry

Communication

Computer Information Systems

Cybersecurity

Economics

English

Fine Arts

French

Geology

History Latino Studies

Mathematics

Medical Humanities

Music

Neuroscience

Philosophy

Physics

Political Science

Pre-Law

Psychology

Race-Ethnic Studies

Sociology

Spanish

Theatre

Women's and Gender Studies

Other Programs

Astronomy

Comparative Literature

Computer Science

Geography

Journalism

Linguistics

Music

Pre-Dentistry

Pre-Medicine

Pre-Optometry

Pre-Pharmacy

Pre-Podiatry

Pre-Veterinary Religious Studies

Speech

Telecommunications

Bachelor of Arts

The Bachelor of Arts degree programs provide students with a broadly based education. The BA requires fewer credits that are directly linked to a particular major. Instead, students complete courses across a wide range of disciplines. This provides a great deal of flexibility to customize their education to reach their individual goals and interests. The BA programs help students develop strong written and verbal communication skills, reasoning skills, the ability to solve complex problems, to work well with others, and to adapt to a changing workplace. Students learn how to think independently, how to make sound judgments, how to discover new perspectives, and acquire the tools to defend your point of view. These are the most valuable skills of an educated person in the 21st Century.

Specific Requirements

In addition to the general requirements for all degrees in the university, 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.

Classes may be attributed towards satisfying all designated requirements across Groups I, II, III, IV,V and the minor. For instance, a student may complete a designated mathematics course and use that to satisfy a requirement within Group I, within Group IIIA, within Group V or within the minor. No more than 9 credit hours within a single discipline will be counted across Groups I, II, III, and IV.

The list of disciplines and courses designated for each requirement group can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm

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 the following way:

 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 completing, with a grade of C (2.0) or higher, one of the following courses: MATH M100, MATH M111, MATH M118, MATH M119, MATH M125, MATH M127, or MATH M215.
- By exemption (without credit) through an appropriate examination as determined by the Department of Mathematics.

Intensive Writing

Intensive writing courses totalling at least 9 credit hours must be completed *after* completing the ENG W131 requirement:

- By completing intensive writing courses at the 200 level or above in the English department, or
- By completing "Intensive Writing Courses" 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.

First Year Seminar

The first year seminar is required for students who have just begun college, those who are transferring fewer than 30 credits from a four-year college, and those transferring in from a two-year college (including TSAP students). The student may satisfy this requirement in the following way:

- By completing a "First-Year Seminar" course in any arts and sciences department. If so designated, the course may also be counted toward fulfilling other arts and sciences degree requirements.
- By completing and transferring at least 30 credits (not counting dual credits) from an accredited fouryear college or university.

All entering students should take a First-Year Seminar when they enter the university. In the rare occasion in which a student reaches upper-class standing without completing the First-Year Seminar, those classes will not help them. In that case students should:

- 1. Complete a study abroad experience.
- 2. Complete an internship/externship/practicum experience.
- Complete a service-learning class (with presentation at the COAS Research Conference).
- Complete a Senior-level careers course that will aid their transition to the workforce or next educational step.

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 complete these courses. The requirement may be met by examination or by successful completion of the courses 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.)

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

- By completing satisfactorily 6 credit hours of course work (200 and 250) or the equivalent in a foreign language.
- By completing the 200 level course and two semesters of designated 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.
 - The two semesters of culture courses taken in lieu of 250 will only be counted under Group II and cannot simultaneously be counted in any other Group distribution. See <u>online Matrix</u> located on the COAS webpages for a list of acceptable classes.
- By attaining a placement test score sufficient for placement in courses at the first- semester third-year level or above in a foreign language.
- If a student places into the 250 level, she will need only to complete that class to meet the Group II requirement.

SPECIAL CREDIT AS A RESULT OF PLACEMENT TEST

Special credit may be awarded for the two highest courses a student tests out of (100, 150, 200, or 250), up to a maximum of 8 credits.

Any student who is full-time (12cr. – 18cr.) does not need to pay for special credits under the banded tuition fee for full-time students, regardless of their freshman to senior status. Transfer and new students in their first year who are part-time are also exempt from charge for special credits. All others must pay a per credit rate for eligible special credits.

For more information about the placement test and eligibility requirements, please visit:

Proficiency Examinations

A student may complete the language requirement by taking a proficiency examination administered by the department concerned. Please note that no credit is conferred through this process. 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.

Native Speakers of a Foreign Language

Students are considered "native speakers of a foreign language" if they have completed secondary (high) school in that language. They may not earn credit for any courses at the fist or secondary-year level in their native language but they may be exempted from the foreign language requirement. If the student did not complete secondary (high) school in another language, he or she may take the placement test.

For more information about the placement test and eligibility requirements, please visit: http://

www.northwest.iu.edu/placement-testing/modern-languages/index.htm

For questions, please contact the Department of Modern Languages at 219-980-6714.

Group III: Distribution

Students must take 12 credit hours in each of the three categories from at least two disciplines within each category.

A complete list of courses that fulfill these requirements is located and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm .

A course used to satisfy requirements within Group III can also be used to satisfy requirements in Groups I, II, IV, V, or the minor.

IIIA. Mathematics, physical sciences, and life sciences - A student must take at least one science course in Group III A that includes a laboratory (at least 4 credit hours).

IIIB. Social and behavioral sciences

IIIC. Humanities - A student must take at least one studio arts/performing arts/creative writing lab course in the humanities (at least 3 credit hours).

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. A course used to satisfy requirements within Group IV can also be used to satisfy requirements in Groups I, II, III, V, or the minor.

IVA. Select **one History course** from the IVA list. (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.

IVB. Racial Minority Experience in the United States. Students must complete one course from the list of Group IV B courses. (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.

IVC. 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 (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.

Group V: Requirements for the Major

Students should plan a tentative outline of their academic program in their major with their advisors in their academic department as soon as they matriculate or declare a 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.

Group Va: Courses within the Major

- At least 25 credit hours must be taken in the major subject area. For B.A. programs, no major department may require more than 42 credit hours in the major. (This stipulation does not apply to interdepartmental majors.)
- The cumulative grade point average of courses used to satisfy the major (Group Va) must be at least 2.0.
- Any course in which the student receives a grade below C- (1.7) may not be used to fulfill requirements for the major. However, any non-repeated course that the student passes will count toward the 120 credit hour total.
- A course used to satisfy requirements for the major (Group Va) can be used to satisfy requirements in Groups I, II, III, and IV.
- At least 10 credit hours within the major discipline must be completed while in residence at IU Northwest.
- 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.)
- 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., intensive writing, major, 300-400 level). Consult departmental advisors for details.

Group Vb: Ancillary Courses Required by the Major

- Departments may require a set of ancillary courses taught outside of the major discipline to support learning within the discipline (for example, a chemistry major needs a background in calculus to succeed within chemistry).
- Any course in which the student receives a grade below C- (1.7) may not be used to satisfy an ancillary (Group Vb) requirement. However, any non-repeated course that the student passes will count toward the 120 credit hour total.
- A course used to satisfy ancillary requirements for the major (Group Vb) can be used to satisfy requirements in Groups I, II, III, IV, or a minor. They cannot be used to satisfy requirements within the major (Group Va).

For procedure regarding change of major, see the Student Ombudsperson in the College Office.

Degree Completion Chart for Bachelor of Arts

The Checklist for BA Core Requirements for the Bachelor of Arts Degree in the College of Arts and Sciences can be found at http://www.northwest.iu.edu/coas/student-tools/index.htm under the heading "Core requirements checklist".

Minors (Optional)

A minor shall consist of 15-20 credit hours with a grade of C- or higher and a cumulative grade point average of at least 2.0 in the minor. (A minimum of 2 courses totaling at least 6 credit hours must be taken while in residence at IU Northwest.) Up to three courses (9cr. max) taken to satisfy the major (Group Va) may be used to satisfy requirements for the minor.

Students may pursue a minor in a different discipline than their major. For instance, a French major may pursue a sociology minor, but a French major cannot pursue a French minor. Students may have more than one minor. Students' major(s) and minor(s) may be listed on their transcripts. Students must advise the College of Arts and Sciences Office 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.

Bachelor of Science

The Bachelor of Science degree programs are designed to provide an in depth education about a specific field. As such, they could be thought of as a specific purpose degree. The programs are focused on learning a great deal about the specific subject matter. They typically require more credits that are directly linked to the major. Students are expected to concentrate their academic energies on mastering the technical and practical facets of their field. They have fewer opportunities to explore topics outside of their major. Many students pursuing BS degrees use these credentials to enter specific careers or to prepare for specific graduate programs.

Specific Requirements

In addition to the general requirements for baccalaureate degrees of the university, candidates for the B.S. degree must complete the group requirements as follows. Students may elect to follow the requirements currently in effect or the requirements that were in effect when they matriculated.

Classes may be attributed towards satisfying all designated requirements across Groups I, II, III, IV, V, and the minor. For instance, a student may complete a designated mathematics course and use that to satisfy a requirement within Group I, within Group IIIA, and within Group V. No more than 9 credit hours per discipline will be counted across Groups I, II, III, IV, and the minor.

The list of disciplines and courses designated for each requirement group may be found in Appendix I in the Bulletin and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.

Minors

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 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 completing, with a grade of C (2.0) or higher, one of the following courses: MATH-M 100, MATH-M 111, MATH-M 118, MATH-M 119, MATH-M 125, MATH -M 127, MATH-M 215. This course can sometimes 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.

First Year Seminar

The first year seminar is required for students who have just begun college, those who are transferring fewer than 30 credits from a four-year college, and those transferring in from a two-year college (including TSAP students). The student may satisfy this requirement in the following way:

- By completing a "First-Year Seminar" course in any arts and sciences department. If so designated, the course may also be counted toward fulfilling other arts and sciences degree requirements.
- By completing and transferring at least 30 credits (not counting dual credits) from an accredited fouryear college or university.

All entering students should take a First-Year Seminar when they enter the university. In the rare occasion in which a student reaches upper-class standing without completing the First-Year Seminar, those classes will not help them. In that case students should:

- 1. Complete a study abroad experience.
- Complete an internship/externship/practicum experience.
- 3. Complete a service-learning class (with presentation at the COAS Research Conference).
- Complete a Senior-level careers course that will aid their transition to the workforce or next educational step.

Group II: Intensive Writing

Two intensive writing courses (totalling at least 6 credit hours) must be completed *after*completing the ENG W131 requirement:

- By completing intensive writing courses at the 200 level or above in the English department, or
- By completing one or two "Intensive Writing Courses" 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

Group III: Distribution

IIIA. Mathematics, physical sciences, and life sciences. A student must take at least one science course in Group IIIA that includes a laboratory (at least 4 credit hours of the lab and associated lecture). Departments may require additional math and science courses. These can be found in Group Vb of the major when applicable.

IIIB. Social and behavioral sciences. 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 and at least 2 disciplines completed in each category.

IIIC. Humanities. 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 and at least 2 disciplines completed in each category.

The list of disciplines and courses designated for each requirement group may be found in Appendix I in the Bulletin and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.

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.) A complete list of the courses that fulfill this requirement can be found in the College of Arts and Sciences B.A. section of this bulletin.

Group V: Requirements for the Major

Students should plan a tentative outline of their academic program in their major with their advisors in their major department as soon as they matriculate or declare a 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.

Group Va: Courses within the Major

 At least 25 credit hours must be taken in the major subject area. For B.S. programs, no major department may require more than 48 credit hours in the major. (This stipulation does not apply to interdepartmental majors.

- The cumulative grade point average of courses used to satisfy the major (Group Va) must be at least 2.0.
- Any course in which the student receives a grade below C- (1.7) cannot be used to fulfill requirements within the major. However, any non-repeatedcourse that the student passes will count toward the 120 credit hour total.
- At least 10 credit hours within the major discipline must be completed while in residence at IU Northwest.
- Students may pursue a minor. Departments may require a minor. Minors typically require 15 to 20 credit hours outside of the major subject area.
 Any course taken to satisfy the requirements of a minor must be completed with a grade of C- (1.7) 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 coursework in the minor must be taken in residence at IU Northwest. (See the individual departmental listings.)
- 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., intensive writing, major, 300-400 level). Consult departmental advisors for details.

Group Vb: Ancillary Courses Required by the Major

- Departments may require a set of ancillary courses taught outside of the major discipline to support learning within the discipline (for example, a chemistry major needs a background in calculus to succeed within chemistry).
- Any course in which the student receives a grade below C- (1.7) may not be used to satisfy an ancillary (Group Vb) requirement. However, any non-repeated course that the student passes will count toward the 120 credit hour total.
- A course used to satisfy ancillary requirements for the major (Group Vb) can be used to satisfy requirements in Groups I, II, III, IV, or a minor. They cannot be used to satisfy requirements within the major (Group Va).

Minors (Optional)

A minor shall consist of 15 to 20 credit hours with a grade of C- or higher and a cumulative grade point average of at least 2.0 in the minor. (A minimum of 2 classes totaling at least 6 credit hours must be taken while in residence at IU Northwest.)

For procedure regarding change of major, see the Student Ombudsperson in the College Office.

Degree Completion Chart for Bachelor of Science

The Checklist for BS Core Requirements for the Bachelor of Science Degree in the College of Arts and Sciences can be found at http://www.northwest.iu.edu/coas/student-tools/index.htm under the heading "Core requirements checklist".

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.) Up to three courses (9 cr.

max) taken to satisfy the major (Group Va) may be used to satisfy requirements for the minor.

Students may pursue a minor in a different discipline than their major. For instance, a French major may pursue a Chemistry minor, but a Chemistry major cannot pursue a Chemistry minor.

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.

Bachelor of Fine Arts

College of Arts and Sciences/School of the Arts Bachelor of Fine Arts

The College of Arts and Sciences at IU Northwest offers instruction leading to Bachelor of Fine Arts degree in Studio Art.

Specific Requirements

In addition to the general requirements for baccalaureate degrees of the university, candidates for the B.F.A. degree must complete the group requirements.

Students may elect to follow the requirements currently in effect or the requirements that were in effect when they matriculated.

Classes may be attributed towards satisfying all designated requirements across Groups I, II, III, IV, and V and the minor. For instance, a student may complete a designated mathematics course and use that to satisfy a requirement within Group I, within Group IIIA, and within Group V. No more than 9 credit hours per discipline will be counted across Groups I, II, III, and IV.

The list of disciplines and courses designated for each requirement group may be found in Appendix I in the Bulletin and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.

Group I: Foundation Courses English Composition

Students must demonstrate the ability to use correct, clear, effective English. The student may satisfy this requirement 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 completing, with a grade of C (2.0) or higher, one of the following courses: MATH M 100, MATH-M 111, MATH M118, MATH M 119, MATH M 125, MATH-M 127, MATH M 215.
- By exemption (without credit) through an appropriate examination as determined by the Department of Mathematics.

First Year Seminar

The first year seminar is required for students who have just begun college, those who are transferring fewer than 30 credits from a four-year college, and those transferring in from a two-year college (including TSAP students). The student may satisfy this requirement in the following way:

- By completing a "First-Year Seminar" course in any arts and sciences department. If so designated, the course may also be counted toward fulfilling other arts and sciences degree requirements.
- By completing and transferring at least 30 credits (not counting dual credits) from an accredited fouryear college or university.

All entering students should take a First-Year Seminar when they enter the university. In the rare occasion in which a student reaches upper-class standing without completing the First-Year Seminar, those classes will not help them. In that case students should:

- 1. Complete a study abroad experience.
- Complete an internship/externship/practicum experience.
- 3. Complete a service-learning class (with presentation at the COAS Research Conference).
- Complete a Senior-level careers course that will aid their transition to the workforce or next educational step.

Group II: Intensive Writing

Three intensive writing courses (totalling at least 9 credit hours) must be completed *after*completing the ENG W131 requirement:

- By completing intensive writing courses at the 200 level or above in the English department, or
- By completing "Intensive Writing Courses" 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.

Group III: Distribution

A student must take a total of 27 credit hours listed under the categories of Group IIIA, IIIB and IIIC with a minimum

of 6 credit hours and at least 2 disciplines completed in each category.

(A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm.)

IIIA. Mathematics, physical sciences, and life sciences. A student must take at least one science course in Group IIIA that includes a laboratory (at least 4 credit hours of the lab and associated lecture).

IIIB. Social and behavioral sciences

IIIC. Humanities

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. A course used to satisfy requirements within Group IV can also be used to satisfy requirements in Groups I, II, III, and V.

- IVA. Select one History course from the IVa list. (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm).
- IVB. Racial Minority Experience in the United States. Students must complete one course from the IVb list. (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm).
- IVC. Additional Diversities (social class, language, religion, gender, sexual orientation, age, disabilities, non-western culture). Students must complete one course from the IVc list. (A complete list of courses that fulfill these requirements is located in and can be searched through the Matrix App at www.northwest.iu.edu/coas/student-tools/index.htm).

Group V: Requirements for the Major

Students should plan a tentative outline of their academic program with their advisors in their major department as soon as they matriculate or declare a major. They should continue to revise and update their plan each year as they progress through their education.

The following are minimum requirements for any major. Further and detailed requirements can 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.

Admission to the B.F.A. Program

Admission to the B.F.A. program is based upon a portfolio and transcript review at the end of the sophomore year. Prerequisites for admission include:

- 1. Completion of the following courses:
 - A101 and A102 art history (6 cr.)
 - Fundamental studio (9 cr.)
 - Two, 200 level studio classes
 - English W131 (3 cr.)

 One of the following math courses: M100, M118, M119, M125 or M215

2. Portfolio review by departmental committee

Requirements Va (57 cr.)

- Fundamental Studio (9 cr.)
- Studio courses above 100 level (48 cr.) must include a minimum of three and a maximum of six of the introductory (200) level courses
- FINA-S497 Independent Study in Studio Art, Capstone, for the Spring semester during the final year. (1 cr.)

Requirements Vb (14 cr.)

- FINA-A101 and FINA-A102 art history (6 cr.)
- Two 300 level art history (6 cr.)
- FINA-A435 Art Theory, Capstone, for juniors and seniors, taken in the Fall semester (2 cr.)

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.
- 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
- The final grade for FINA-S497 will be based on the Senior Exhibit, and will be determined by a faculty committee.
- At least 71 credit hours must be taken in the major (Fine Arts and Art History), and the cumulative grade point average of courses used to satisfy the major (Group Va) must be at least 2.0.
- Any course in which the student receives a grade below C- (1.7) may not be used to fulfill requirements for the major. However, any non-repeated course that the student passes will count toward the 120 credit hour total.
- At least 10 credit hours within the major discipline must be completed while in residence at IU Northwest.
- 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 listing.)

- Online Fine Arts studio classes cannot be used to fulfill Fine Arts degree requirements at IU Northwest.
- Students must take 3 credit hours of capstone course work. These courses may also be counted toward fulfilling other arts and sciences degree requirements (e.g., intensive writing, major, 300-400 level). Consult departmental advisors for details.

For procedure regarding change of major, see the Student Ombudsperson in the College office.

Degree Completion Chart for Bachelor of Fine Arts

The Checklist for BFA Core Requirements for the Bachelor of Fine Arts Degree in the College of Arts and Sciences can be found at http://www.northwest.iu.edu/coas/student-tools/index.htm under the heading "Core requirements checklist".

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.) Up to three courses (9 cr. max) taken to satisfy the major (Group Va) may be used to satisfy requirements for the minor.

Students may pursue a minor in a different discipline than their major. For instance, a French major may pursue a sociology minor, but a French major cannot pursue a French minor.

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.

Certificates

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

- Computer Information Systems
- 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-inresidence 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.
- Students who are pursuing an Interdepartamental major may also pursue a minor. However, they cannot pursue a minor in either of the disciplines or subjects that combine to create their Interdepartamental Major.

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

- Computer Information Systems and Fine Arts -Graphic Design
- 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, 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 quality, 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.

Pre-Dental Requirements

The following classes are recommended to fulfill prerequisite requirements for most dental schools:

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- BIOL-M 310 (4 cr.)
- CHEM-C 105 & C 125 (5 cr.)
- CHEM-C 106 & C-126 (5 cr.)
- CHEM-C 341 (3 cr.)
- CHEM-C 343 (2 cr.)
- CHEM-C 342 (3 cr.)
- CHEM-C 344 (2 cr.)
- CHEM-C 484 (3 cr.)
- PHSL-P 261 (4 cr.)
- PHSL-P 262 (4 cr.)
- Select one of the following physics series:
 - PHYS-P 201 and P 202 (10 cr.)
 - PHYS-P 221 and P 222 (10 cr.)
- Psychology or sociology (3-6 cr.)
- ENG-W 131 (3 cr.)

For further information regarding programs, the Dental Aptitude Test, and applications, contact the health professions advisor at (219) 980-7106.

l aw

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 concentration, 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 201 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-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, or (219) 980-6655.

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.

The following classes are recommended to fulfill prerequisite requirements for most medical schools:

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- CHEM-C 105 & C 125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)
- CHEM-C 341 (3 cr.)
- CHEM-C 343 (2 cr.)
- CHEM-C 342 (3 cr.)
- CHEM-C 344 (2 cr.)
- CHEM-C 484 (3 cr.)
- Select one of the following physics series:
 - PHYS-P 201 and P 202 (10 cr.)
 - PHYS-P 221 and P 222 (10 cr.)
- PSY-P 103 (3 cr.)
- SOC-S 161 (3 cr.)
- Many schools require English composition (ENG-W 131 and W 231) (6 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) 980-7106.

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, and then 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.

Requirements for occupational therapy programs can vary considerably. The following classes are recommended to fulfill prerequisite requirements for most occupational therapy schools:

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- CHEM-C 101 (3 cr.)
- CHEM-C 121 (2 cr.)
- PHSL-P 261 (4 cr.)
- PHSL-P 262 (4 cr.)
- MATH-M 118 or higher (3 cr.)
- ENG-W 131 and W 231 (6 cr.)
- Basic statistics (K 300) (3 cr.)
- Introductory sociology (SOC-S 161) (3 cr.)
- Introductory psychology (PSY-P103) (3 cr.)
- Abnormal psychology (PSY-P 324) (3 cr.)
- Development psychology (PSY-B 310) (3 cr.)
- Medical terminology (1-3 cr.)
- Electives (12-13 cr.)

For further information contact the health professions advisor at (219) 980-7106.

Optometry

Indiana University offers a seven-year program leading to a degree in optometry (three years preoptometry, four years in the School of Optometry). IU Northwest offers courses required for entry in a doctor of optometry program. Upon completion of their bachelor's degree, stuents must apply to an optometry program for admission.

The following classes are recommended to fulfill prerequisite requirements for most optometry schools:

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- BIOL-M 310 with lab (4 cr.)
- plus one additional advanced Biology course (3 cr.)
- CHEM-C 105 & C125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)
- CHEM-C 341 & C-343 (5 cr.)
- CHEM-C 484 (3 cr.)
- PHSL-P 261 (4 cr.)
- PHSL-P 262 (4 cr.)
- MATH-M 215 (5 cr.)
- PHYS-P 201 (5 cr.)
- PHYS-P 202 (5 cr.)
- PSY-P 103 (3 cr.)
- PSY-K 300 (3 cr.)
- ENG-W 131 (3 cr.)
- one additional intensive writing course (3 cr.)
- Arts and humanities (6 cr.)
- Social and behavioral sciences (6 cr.)
- Proficiency equivalent of foreign language (6 cr.)

For applications and additional information contact the health professions advisor at (219) 980-7106.

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.

Pre-Pharmacy Requirements

The following classes are recommended to fulfill prerequisite requirements for Purdue School of Pharmacy:

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- BIOL-M 310 with lab (4 cr.)
- BIOL-L 321 (3 cr.)
- CHEM-C 105 & C 125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)
- CHEM-C 341 & C 343 (5 cr.)
- CHEM-C 342 & C 344 (5 cr.)
- CHEM-C 484 (3 cr.)
- PHSL-P 261 (4 cr.)
- PHSL-P 262 (4 cr.)
- MATH-M 215 (5 cr.)
- MATH-M 216 (5 cr.)
- PHYS-P 201 or PHYS-P 221 (5 cr.)
- Basic statistics (K 300) (3 cr.)
- ECON- E 103 or E 104 (3 cr.)
- ENG- W 131 and W 231 (6 cr.)
- SPCH-S 121 (3 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) 980-7106.

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 a doctoral program in physical therapy. Upon completion of the bachelor's degree, students must apply for entry to a school of physical therapy for their professional training. Admission to a physical therapy program also requires documented volunteer or paid experiences in health care settings.

Pre-Physical Therapy Requirements

The following classes are recommended to fulfill prerequisite requirements for most physical therapy schools:

- BIOL-L101 (4cr.)
- BIOL-L 102 (4 cr.)
- CHEM-C 105 & C 125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)
- Select one of the following physics series:
 - PHYS-P 201 and P 202 (10 cr.)
 - PHYS-P 221 and P 222 (10 cr.)
- PHSL-P 261 (4 cr.)
- PHSL-P 262 (4 cr.)
- Basic statistics (K 300) (3 cr.)
- Introductory psychology (PSY-P103) (3 cr.)
- PSY-B 310 (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) 980-7106.

Physician Assistant

Indiana University now offers a degree program in physician assistant studies. 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 have similar general requirements.

Pre-Physician Assistant Requirements

The following classes are recommended to fulfill prerequisite requirements for the IU Masters of Physician Assistant program.

- BIOL-L101 (4cr.)
- BIOL-L 102 (4 cr.)
- BIOL-M 310 with lab (4 cr.)
- CHEM-C 105 & C 125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)
- CHEM-C 341 & C 343 (5 cr.)
- CHEM-C 342 & C 344 (5 cr.)
- PHSL-P 261 (4 cr.)
- PHSL-P 262 (4 cr.)
- Introductory psychology (PSY-P103) (3 cr.)
- Basic statistics (K 300) (3 cr.)

Medical terminology (1 cr.)

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) 980-7106.

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.

Pre-Podiatry Requirements

The following classes are recommended to fulfill prerequisite requirements for all podiatry schools:

- BIOL-L 101 (4 cr.)
- BIOL-L 102 (4 cr.)
- CHEM-C 105 & C125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)
- CHEM-C 341 & C-343 (5 cr.)
- CHEM-C 342 & C-344 (5 cr.)
- Select one of the following physics series:
 - PHYS-P 201 and P 202 (10 cr.)
 - PHYS-P 221 and P 222 (10 cr.)
- ENG- W 131 and W 231 (6 cr.)

In addition to the above prerequisite classes, most podiatry schools list recommended classes that students should consider taking.

Science courses must include laboratories.

Further information on the health professions and podiatry may be obtained by contacting the health professions advisor at (219) 980-7106.

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.

Pre-Veterinary Science Requirements

The following classes are recommended to fulfill prerequisite requirements for Purdue University College of Veterinary Science:

- BIOL-L101 (4cr.)
- BIOL-L 102 (4 cr.)
- BIOL-L 311 (4 cr.)
- BIOL-M 310 with lab (4 cr.)
- CHEM-C 105 & C 125 (5 cr.)
- CHEM-C 106 & C 126 (5 cr.)

- CHEM-C 341 & C 343 (5 cr.)
- CHEM-C 342 & C 344 (5 cr.)
- CHEM-C 484 (3 cr.)
- Select one of the following physics series:
 - PHYS-P 201 and P 202 (10 cr.)
 - PHYS-P 221 and P 222 (10 cr.)
- MATH-M 215 (5 cr.)
- ENG- W 131 (3 cr.)
- SPCH-S 121 (3 cr.)
- Humanities electives 3 classes (9 cr.)
- Nutrition (animal based)
- Careers in Veterinary Science (if available)

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) 980-7106.

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. Any credits in excess of 120 will appear on the academic transcript and will be credited to the academic record.

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.

Double Majors and Double Degree

Often, students are passionate about more than one field, are ambitious, and want to improve their marketability. In that case, students may complete the requirements of two (or more) majors and their associated distribution requirements to complete two majors, qualify for two

degrees, and recieve two diplomas. That is, a student may pursue a BA in History and a BS in Geology and if the student completes both sets of major and both sets of requirements, will recieve two degrees and two diplomas. Students pursuing a double degree may use courses in either or both degrees to satisfy designated distribution requirements.

School of the Arts

Phone: (219) 980-6810

Webpage: http://www.northwest.edu/arts

About the School of the Arts

The IU Northwest School of the Arts offers degrees in communication, digital media and storytelling, fine arts, and theatre.

We prepare creative and civic professionals to thrive in a fast-paced field of arts, entertainment, and media. We are a center of innovation and multidisciplinary engagement with internationally recognized faculty and a direct pipeline to public and private sector opportunities in Northwest Indiana, Chicago, and beyond.

Highlights include two state-of-the-art theaters, a radio station, light-drenched artist studios, a sculpture garden, and two galleries featuring rotating works by local, national, and international artists.

Communication

Phone: 219-980-6810

Website: http://www.northwest.iu.edu/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. Communication is one of the core national areas and IUN recognizes this need by requiring and/or providing the basic SPCH-S121 Public Speaking course across campus curriculums. For purposes of organization and utility, courses in speech, communication, public relations, journalism, 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 behavior and research in a variety of settings. The major serves as a foundation for professional fields such as nonprofit and profit public relations, personnel, sales, and training as well as providing excellent preparation for graduate study in communication, law, the ministry, public administration, public relations, and business.

Communication (COMM), Journalism (JOUR), Speech (SPCH), and Telecommunications (TEL) courses are alpha clustered listed within separate emphasis sections.

Major in Communication

Learning Outcomes

LOC #1: Describe the Communication discipline and its central questions

LOC #2: Employ Communication theories, perspectives, principles, and concepts

LOC #3: Engage in Communication inquiry

LOC #4: Create messages appropriate to the audience,

purpose, and context

LOC #5 : Critically analyze messages

LOC #6: Demonstrate the ability to accomplish communicative goals (self-efficacy)

LOC #7: Apply ethical communication principles and

LOC #8: Utilize communication to embrace difference LOC #9: Influence public discourse

Requirements

- 1. A minimum of 30 credit hours, with grades of C- or higher, in courses labeled SPCH, COMM, JOUR, or TÉL.
- 2. As part of the 30 credit hours, students must take SPCH-S 122, SPCH-S 424, SPCH-S 400 (must have 21 credit hours completed in the major before taking capstone course), and Tel-C 200 or COMM-
- 3. Seniors completing 21 credit hours in the major must take SPCH-S 400 (the capstone course).
- 4. Communication majors must take a minimum of three additional course designated as intensive writing courses. The Department of Communication offers a choice for the second intensive writing course:
- SPCH-S405
- SPCH-S427
- COMM-J429
- SPCH-S450
- 5. A minimum of 15 credit hours must be taken at the 300-400 level within the major. 36 hours required overall.
- 6. 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 interest areas:

Interest Areas for Communication Majors

Cultural & Relational Communication

- COMM-J 219 Introduction to Public Relations (3 cr.)
- COMM-M 460 Culture and Mass Communication (3
- SPCH-S 122 Interpersonal Communication (3 cr.)
- SPCH-S 322 Advanced Interpersonal Communication (3 cr.)
- SPCH-S 405 Human Communication Theory (3 cr.) (intensive writing course)
- SPCH-S 450 Gender and Communication (3 cr.) (intensive writing course)

Business Communication and Public Relations

- COMM-J 219 Introduction to Public Relations (3 cr.)
- COMM-C320 Advanced Public Speaking (3 cr.)
- COMM-J321 Advanced Public Relations (3 cr.)
- COMM-J429 Public Relations Campaigns (3 cr.) (intensive writing course)
- SPCH-S 223 Business and Professional Speaking (3
- SPCH-S 405 Human Communication Theory (3 cr.)
- SPCH-S 450 Gender and Communication (3 cr.)

New Media Studies and Mass Communication

- COMM-C215 Media Literacy (3 cr.)
- COMM-J 219 Introduction to Public Relations (3 cr.)
- COMM-C 340 Practicum in Media Production (3 cr.)
- COMM-C 351 TV Production I (3 cr.)
- COMM-C462 Media Theory & Criticism (3 cr.)
- JOUR-J 200 Writing for Mass Media (3 cr.)
- TEL-C 200 Introduction to Mass Communication (3cr.)
- TEL-R 204 Foundations of Telecommunications (3
- TEL-R 308 Radio Production and Directing (3 cr.)

Degree Attainment Meets Diverse Scheduling Needs

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 recommended for communication majors. 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.

Practicum & Independent Study

There are also practicum and independent study courses such as COMM-C 340 and SPCH-S398 for students wishing to tailor their educational experience.

Major in Digital Media and Storytelling (ONLINE)

The Bachelor of Science in Digital Media and Storytelling is a fully online degree offered by

IU Northwest collaboratively with the other regional IU campuses. Students will have the opportunity to develop career-ready skills in digital media and communication by taking a wide range of

courses in addition to completing a capstone.

Learning Outcomes

- 1. Apply theories of mass and mediated communication in the use and presentation
- of images and information.
- 2. Critically evaluate and assess information in its credibility, use, and effectiveness in public communication messages.

- 3. Use digital tools creatively to develop stories, images, and messages.
- 4. Engage and inform audiences in multiple contexts.
- 5. Analyze the historical, legal, and ethical dimensions of professional practices.
- 6. Use a range of skills to work effectively both independently and collaboratively to accomplish goals.
- 7. Conduct and apply research using methods appropriate to media professions.

To earn the B.S. in Digital Media and Storytelling, students must complete the standard campus-and school-specific degree requirements, including general education, of their campus of enrollment, and the 40 hours B.S. in Digital Media and Storytelling major.

Degree requirements are as follows:

I. Digital Media Storytelling—Core (22cr)

1. Writing (2 courses/6 cr)

i. Complete one of:

ENG-W 203 Creative Writing

ii. Complete one of:

ENG-W 231 Professional Writing

ENG-W 234 Technical Report Writing

ENG-W 270 Argumentative

JOUR-J 200 Reporting, Writing, Editing

NEWM-N 260 Scriptwriting

2. Visual Literacy (3 cr)

Complete one of:

JOUR-J 210 Visual Communication COMM-M 215 Media Literacy

3. Digital Tools (3 cr)

Complete one of:

FINA-D 210 Digital Art: Survey and Practice COMM-M 210 Media Message Design NEWM-N 202 Digital Storytelling

4. Gateway to the Digital Media Storytelling Major (3 cr)

Complete:

JOUR-J 205 Sophomore Seminar Digital Media Storytelling

Career Preparation (1cr) (existing courses to be used until new class developed)

Complete one of:

JOUR-J 307 Media Career Planning JOUR-J 400 Careers in Public Relations

6. One Media Law class (3cr)

Complete one of:

JOUR-J 300 Communications Law CMCL-C 328 Digital Responsibilities and Rights

7. One Media History class (3 cr)

Complete one of:

COMM-M 370 History of Television

COMM-M 373 Film and Video Documentary FINA-A 477 History of Photography FILM-C393 History of European & American Film I FILM-C394 History of European & American Film II FILM-C 395 History of American Film

II. Digital Media and Storytelling Specializations (15cr)

Complete of the following five course specializations:

A) Public Relations (15cr)

1. Public Relations Core

Complete the following 4 classes:

COMM-J 321/JOUR-J 321/SPCH-S 233 Introduction to Public Relations JOUR-J 349/JOUR-J 390/SPCH-S 333/COMM-C 349 Public Relations Writing COMM-C 429/JOUR-J 429 Public Relations Campaigns JOUR-J 403 Public Relations Research

Complete one of:

CMCL-C 315 Advertising and Consumer Culture CMCL-C 324 /COMM-R 321 Persuasion COMM-C 462 Media Theory & Criticism COMM-M 462 Television Aesthetics/Criticism SPCH-S 303 Propaganda and Persuasion JOUR-J 410 Media as Social Institutions

2. Theories of Public Relations and Media Culture

B) Digital Storytelling (15cr)

1. Advanced Making courses (9cr)

Complete courses selected from each of the following three categories.

i. Writing as Making Complete one of:

ENG-W 301 Writing Fiction

ENG-W 302 Introduction to Screen Writing

NEWM-N 260 Script Writing ENG-W 303 Writing Poetry

ENG-W 305/W311 Writing Creative Non-Fiction

ENG-W 315 Writing for the Web ENG-W 318 Finding Your E-Voice

ENG-W 323 Digital Writing

ii. Digital, Photography, and Video—Lens-Based Image Construction

Complete:

FINA-S 303 Lens-Based Narrative Construction iii. Interactive/Emergent Media

Complete one of:

JOUR-J 301 Social Media Strategies JOUR-J 303 Online Journalism NEWM-N 485 Social Media Content, Analytic

2. Media Critique and Analysis Course (3cr)

Complete one

CMCL-C 315 Advertising and Consumer Culture

CMCL-C 324 Persuasion

COMM-C 462 Media Theory & Criticism

COMM-M 462 Television Aesthetics/Criticism COMM-R 321 Rhetoric, Culture & Society

SPCH-S 303 Propaganda and Persuasion

JOUR-J 410 Media as Social Institutions

3. Media Audiences and Platforms

Choose one of:

COMM-C 316 Human Communication in the Digital Age SPCH-S 333/JOUR-J 390/JOUR-J 349 Public Relations Writing

ENG-W 315 Writing for the Web

ENG-W 318 Finding Your E-Voice

ENG-W 323 Digital Writing

III. Digital Media Storytelling Capstone

JOUR-J 495 Digital Media and Storytelling Capstone

Interdepartmental Major in African-American and African Diaspora Studies and Communication

The Departments of Communication and Minority Studies offer a thematically integrated major in African-American and African Diaspora and Communication Studies. This interdepartmental major is designed for students who wish to combine substantial African-American and African Diaspora 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.

Graduate Certificate in Communication Studies

The graduate certificate in Communication Studies is taught consortially by IUPUI, IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Graduate Certificate in Communication Studies provides graduate-level instruction in communication strategies, practices, and techniques. It teaches practical communication skills needed in professional, academic, and personal contexts, such as presenting information, arguing a position, promoting a cause, presenting information via social media, designing targeted messages, and managing relations and conflicts.

Degree requirements

The Graduate Certificate in Communication Studies requires completion of six course for 18 credits and provides graduate-level instruction in communication strategies, practices and techniques to students interested in obtaining advanced skills and knowledge.

Requirements:

1. Communication Pedagogy

Complete CMCL-C 545 Pedagogy in Communication and Culture (3 cr).

2. Communication in Context

Complete three courses chosen from the following list (9 cr.):

COMM-C 510 Health Provider-Consumer Communication COMM-C528 Group Communication And Organizations

COMM-C 544 Advanced Relational Communication

CMCL-C 500 Intro to Graduate Studies and Research

CMCL-C 550 Family Communication

CMCL-C 592 Advanced Health Communication

CMCL-C 593 Topics in Communication: approved topics CMCL-C 594 Communication and Conflict Management in

Organizations

CMCL-C 610 Identity and Difference ENG-R 546 Rhetoric and Public Culture

JOUR-J 522 Political Communication

SPCH-S 502 Intro to Communication Theory

SPCH-S627 Studies in Cross Cultural Communication SPCH-S633 Studies in Interpersonal Communication

SPCH-S640 Studies in Organizational Communication

3. Communication in Media

Complete one of the following three course (3 cr.)

CMCL-C 593 Topics in Communication: VT: Social Media and Communication

CMCL-C 602 Media, Terrorism, and Politics

CMCL-C 606 Media Criticism

CMCL-C 621 Social Media and Communication

COMM-C 530 Communication Criticism

COMM-C 531 Media Theory and Criticism

4. Communication Studies Elective

Complete an additional course selected from the courses listed above or an MLS approved alternative (3 cr.).

Fine Arts

Phone: (219) 980-6810

Website: http://www.northwest.iu.edu/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 - B.A.

The B.A. in studio practice offers a wide-ranging study of the studio arts with an accompanying minor in Art History to prepare students for lifelong visual literacy and employment in the arts. This program exposes students to multiple introductory through advanced-level studio courses while encouraging exploration with new artistic directions, alternative media, or conceptual works.

Requirements

- Minor in Art History
 - FINA-A101 and FINA-A102 (6 cr.)
 - Art history at the 300 and 400 level (9 cr.)
- Fundamental studio (9 cr.)

- Studio courses above the 100 level (minimum of 19 cr.) must include a minimum of three and a maximum of five of the introductory (200-level) courses
- FINA-A 435 Art Theory for Graduating Seniors (2-3 cr.) must be taken during the fall semester.
- During the final year, students have the option to choose to assume full responsibility for mounting a personal exhibit that will include terminal and representative work in the major field. To participate in the senior exhibition, 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. (1-3 cr.)
 - 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 (45 cr.)

The final grade for FINA-S 497 will be based on Senior Exhibit, and will be determined by a faculty committee.

Transfer Credit in Studio

All incoming students who want to transfer studio credit from another institution must submit a digital portfolio 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.

Interdepartmental Major: CIS and Fine Arts

Bachelor of Arts 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.

Requirements in Department of Fine Arts Va (25 cr.)

- Select one of the following:
 - FINA-F 100 Fundamental Studio-Drawing (3 cr.)
 - FINA-F 102 Fundamental Studio-2D (3 cr.)
- FINA-S 250 Introduction to Design Practice (3 cr.)
- FINA-S 351 Typography (3 cr.)
- FINA-S 352 Production for Graphic Design (3 cr.)
- FINA-S 353 Graphic Design IV (3 cr.)
- FINA-S 413 Typography (2 cr.)
- FINA-S 414 Layout and Design (2 cr.)
- FINA-S 415 Package Design (2 cr.)
- FINA-S 451 Graphic Design Problem Solving (3 cr.)
- FINA-S 497 Capstone Independent Study in Fine Arts (1-3 cr.)

Requirements in Department of Fine Arts Vb (8-9 cr.)

- 3 credit hours in the FINA-A100 series (history of art)
- 3 credit hours of 300 or 400 level art history
- FINA-A435 CAPSTONE Art Theory (2-3 cr.)

Requirements in Computer Information Systems (18 cr.)

- CSCI-A 106 Introduction to Computing (3 cr.)
- CSCI-A 251 Introduction to Digital Imaging Application (3 cr.)
- CSCI-A 348 Mastering the World Wide Web (3 cr.)
- INFO-N 248 Design Principles in Web Design (3 cr.)
- INFO-N 215 Online Document Development (3 cr.)
- · Select one of the following:
 - CSCI-A 340 An Introduction to Web Programming (3 cr.)
 - or INFO-I 310 Multimedia Arts and Technology (3 cr.)
 - or INFO-I 400 Topics in Informatics (3 cr.)
 - or CSCI-C 390 Individual Programming Lab (3 cr.)

Total (51 cr.)

In addition to the preceding courses the students are responsible for fulfilling the general requirements of the College of Arts and Sciences.

There is a Bachelor of Science version of this interdepartmental degree. See the Fine Arts Department section for details. schools/coas/departments/computer/ major-cis-arts

Major in Studio Practice - B.F.A.

The B.F.A. degree offers an intensive study of the studio arts with an accompanying focus on art history to prepare students for lifelong visual literacy, employment in the arts, and application to graduate programs. This program requires students to master introductory through advanced-level studio courses in a specific medium while encouraging exploration with new artistic directions, alternative media, or conceptual works.

Admission to B.F.A Program

Admission to the B.F.A program is based upon a portfolio and transcript review. Prerequisites for admission include:

1. Completion of the following courses:

- A101 and A102 art history (6 cr.)
- Fundamental studio (9 cr.)
- Two. 200 level studio courses
- English W131
- One of the following math courses: M100, M118, M119, M125, or M215
- 2. Portfolio review by department committee

Learning Outcomes

LOC #1: A BFA level of visual literacy and aesthetic awareness

LOC #2: A familiarity and competency in a chosen artistic medium

LOC #3: An introductory level understanding of aesthetics and art theory

LOC #4: A general understanding of the history of art LOC #5: The ability to produce and exhibit a personal body of artworks

LOC #6: A competency in writing about art and the ability to produce an artistic statement

Requirements Va (57 cr.)

- Fundamental Studio (9 cr.)
- Studio courses above 100 level (48 cr.) must icnlude a minimum of three and a maximum of six of the introductory (200 level courses)
- S497 Independent Study in Studio Art, Capstone, for the spring semester during the final year (1-3 cr.)
- 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:
- Complete the Senior Review degree audit 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. (1-3 cr.)
 - Prepare the exhibit under the principal teacher's guidance and in consultation with Gallery director. 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

 The final grade for FINA-S497 will be based on the Senior Exhibit, and will be determined by a faculty committee.

Requirements Vb (14 cr.)

- FINA-A 101 and FINA-A 102 art history (6 cr.)
- Two 300 level art history (6 cr.)
- FINA-A 435 (2-3 cr.)

Total (71 cr.)

Transfer Credit in Studio

All incoming students who want to transfer studio credit from another institution must submit a digital portfolio 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 Graphic Design

Working across media, IU Northwest graphic design students gain technical and creative thinking skills while learning design methods and processes essential to a professional career in design. The Minor in Graphic Design will give students an introduction to the standards of a professional design practice while teaching them production and technical skills necessary to pursue a career as a production design or junior designer.

Requirements

Core courses (6 credit hours)

- FINA-S 250 Introduction to Design Practice (3 cr.)
- FINA-S 351 Typography (3 cr.)

Elective courses (9 credit hours)

- FINA-S 352 Production for Graphic Design (3 cr.)
- FINA-S 353 Graphic Design IV (3 cr.)
- FINA-S 413 Typography (2 cr.)
- FINA-S 414 Layout and Design (2 cr.)
- FINA-S 415 Package Design (2 cr.)
- FINA-S 400 Independent Studio Projects (1-6 cr.)
- FINA-S 451 Graphic Design Problem Solving (3 cr.)

Total (15 cr.)

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.)
- 3 Studio Art classes at the 200 or above level (9 cr.)

Total (15 cr.)

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.)

Total (15 cr.)

Performing Arts

Phone: (219) 980-6810

Website: http://www.northwest.iu.edu/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.

Major in Theatre - currently not admitting students

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 (9 cr.)

- THTR-T 120 Acting I (3 cr.)
- THTR-T 228 Design for the Theatre (3 cr.)
- THTR-T 340 Directing I (3 cr.) prerequisites: THTR-T 120 and THTR-T 228 or consent of instructor

PRODUCTION EXPERIENCE (9 cr.)

- THTR-T 168 Practicum (total of 6 cr. required, 1-2 cr. per semester) work on a campus production as a member of the acting company, stage management crew, or production staff
- THTR-T 490 Independent Study in Theatre and Drama (3 cr.) a capstone project planned in advance with a theatre faculty advisor

LABORATORY EXPERIENCE (6 cr.)

- Select two from the following:
 - THTR-T 225 Stagecraft I (3 cr.)
 - THTR-T 230 Costume Design and Technology (3 cr.)
 - THTR-T 335 Stage Lighting Design (3 cr.)

HISTORY, LITERATURE, THEORY (6 cr.)

- THTR-T 470 History of the Theatre I (3 cr.)
- THTR-T 471 History of the Theatre II (3 cr.)

THTR ELECTIVES (9 cr.)

· Select from any THTR courses not listed above

UPPER DIVISION COURSES IN MAJOR (300 level or above) (15 cr.)

Minor in Theatre

Requirements (15 cr.)

THEATRE CORE course (3 cr.)

Select one from the following:

- THTR-T 120 Acting I (3 cr.)
- THTR-T 228 Design for the Theatre (3 cr.)

PRODUCTION EXPERIENCE (3 cr.)

THTR-T 168 Practicum (1-2 cr. per semester) work on a campus production as a member of the acting company, stage management crew, or production staff

LABORATORY EXPERIENCE (3 cr.)

Select one from the following:

- THTR-T 225 Stagecraft I (3 cr.)
- THTR-T 230 Costume Design and Technology (3 cr.)
- THTR-T 335 Stage Lighting Design (3 cr.)

HISTORY, LITERATURE, THEORY (3 cr.)

Select one from the following:

- THTR-T 470 History of the Theatre I (3 cr.)
- THTR-T 471 History of the Theatre II (3 cr.)

THTR ELECTIVES (3 cr.)

Music Minor

Requirements (19-20cr):

CORE COURSES (8-9cr)

• MUS-P100 Piano Elective/Secondary (2cr.)

and select 2 from the following:

- MUS-M111 Music Literature (4 cr.)
- MUS-M174 Music for the Listener (3 cr.)
- MUS-T109 Rudiments of Music 1 (3 cr.)

HISTORY AND CULTURE (6 cr) Select one of the following:

- MUS-A190 Arts, Aesthetics, and Creativity (3 cr.)
- MUS-M333 Hip-Hop Music and Culture (3 cr.)
- MUS-M430 Introduction to Contemporary Music (3 cr.)
- MUS-M201 The Literature of Music 1 (2-3 cr.)
- MUS-M202 The Literature of Music 2 (2-3 cr.)
- MUS-M393 History of Jazz (3 cr)
- MUS-M 400 Undergraduate Readings in Musicology (1-6 cr)
- MUS-Z201 History of Rock and Roll Music (3 cr.)
- MUS-Z315 Music for Film (3cr.)
- MUS-Z373 The American Musical (3 cr.)

CREATIVE PRACTICE (2 cr) Select one of the following:

- MUS-L101 Beginning Guitar (2 cr.)
- MUS-P100 Piano Elective/Secondary (2cr.)
- MUS-V100 Voice Elective/Secondary (2 cr.)

ELECTIVE (3 cr)

Any MUS courses not already applied to the minor

Dance Program

The Department of Performing Arts offers coursework in a variety of dance courses for students who wish to learn a dance style, or further refine their skills.

Dance Courses include

- MUS-J 100 Ballet (2 cr.)
- MUS-J 200 Ballet (secondary) (2 cr.)
- THTR-D115 Modern Dance I (2cr.)
- THTR-D140 Jazz I (2cr.)
- THTR-D205 Choreography (3 cr.)
- THTR-D231 Intro to Dance Studies (3cr.)

Departments

Biology

Phone: (219) 980-6724

Webpage: http://www.northwest.iu.edu/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 environment and conservation. 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. Our faculty maintain active research programs, offering students the opportunity to engage in research projects across a broad spectrum of life science disciplines.

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.

Learning Outcomes

- Students will understand the core and fundamental aspects of living systems.
- 2. Students will be able to conduct scientific research with emphasis on biological research.
- 3. Students will be able to communicate effectively their understanding of life.
- 4. Students will know how to link their training in biology to the common good and the planet.

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 biology honor society. 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.

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 and advisor 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

Course credit may be awarded for high scores on the Advanced Placement and College Entrance Examination Board tests. Please see the Admissions Office and/or the Biology Department for more information.

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 solid foundation in fundamental biology and cognate areas.

Requirements

Students must take the following sequence of classes in the major discipline (Group Va 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,CHEM-C 105, and CHEM-C 125; CHEM-C 106 and CHEM-C 126 may be taken as prerequisites or co-requisites
- BIOL-L 311 (4 cr.) prerequisite* of BIOL-L 211

*=passing with a grade of C- or better

- 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, 1cr.) must be completed during the senior year.
- A course such as BIOL-L 331, BIOL-L 420, BIOL-Z 466 or BIOL-L 473 will satisfy the capstone requirement.

A minimum of one course must be taken from the three areas listed below (each with example courses):

- · Molecular and Cellular Biology
 - BIOL-L 312 (3-4 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-L 331 (3 cr.)
 - BIOL-Z 317 (3 cr.)
- · Ecology, Physiology, and Organismal Biology
 - BIOL-B 351 (3 cr.)
 - BIOL-B 352 (2 cr.)
 - BIOL-Z 406 (3-4 cr.)
 - BIOL-L 473 (3-4 cr.)
 - PHSL-P 431 (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 courses outside the major discipline (Group Vb courses):

- The following courses are required:
 - CHEM-C 105 (3 cr.)
 - CHEM-C 125 (2 cr.)
 - CHEM-C 106 (3 cr.)
 - CHEM-C 126 (2 cr.)
 - CHEM-C 341 Organic Chemistry I (3 cr.)
 - CHEM-C 343 Organic Chemistry I lab (2 cr.)
 - CHEM-C 342 Organic Chemistry II (3 cr.)
 - · Select one of the following
 - CHEM-C344 Organic Chemistry II lab (2 cr.)
 - BIOL-L 323 Molecular Biology lab (3 cr.)
 - Select one of the following series of physics classes
 - PHYS-P 201 (5 cr.) and PHYS-P 202 (5 cr.)
 - PHYS-P 221 (5 cr.) and PHYS-P 222 (5 cr.)
 - Math-M215 Calculus (5 cr.)
 - PSY-K 300 Statistics (3 cr.)
 - select one of the following computer science classes:
 - CSCI-A 106 (3 cr.)
 - CSCI-C 106 (3 cr.)
 - CSCI-A 201 (4 cr.)
 - CSCI-C 201 (4 cr.)

In addition to the above courses, the student is resposible for fullfilling the general requirements of the Bachelor of Science degree as established bye the College of Arts and Sciences.

Major in Biology - B.A.

Requirements

Students must take the following sequence of classes in the major discipline (Group Va 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, CHEM-C 105, and CHEM-C 125; CHEM-C 106 and CHEM-C 126 may be taken as prerequisites or corequisites
- BIOL-L 311 (4 cr.) prerequisite* of BIOL-L 211

*=passing with a grade of C- or better

- At least 18 additional credit hours in Biology upperlevel (300-400) courses must be completed.
- Students must complete at least two additional upper level labs.
- A course such as BIOL-L 331, BIOL-L 420, BIOL-Z 466 or BIOL-L 473 will satisfy the capstone requirement.

A minimum of one course must be taken from the three areas listed below (each with example courses):

- Molecular and Cellular Biology
 - BIOL-L 312 (3-4 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-L 331 (3 cr.)
 - BIOL-Z 317 (3 cr.)
- · Ecology, Physiology, and Organismal Biology
 - BIOL-L 300 (3 cr.)
 - BIOL-Z 406 (3-4 cr.)
 - BIOL-L 473 (3-4 cr.)
 - PHSL-P 431 (4 cr.)

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

- The following general chemistry courses outside the major discipline (Group Vb courses) are required and should be taken concurrently with BIOL-L 101 and BIOL-L 102
 - CHEM-C 105 (3 cr.)
 - CHEM-C 125 (2 cr.)
 - CHEM-C 106 (3 cr.)
 - CHEM-C 126 (2 cr.)

Students planning on applying to 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.

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.

TSAP in Biology - B.A. or B.S.

Completion of an eligible AS or AA degree at Ivy Tech or Vincennes may put you on a Single Articulation Pathway

to a BA or BS at IU Northwest, without a loss of credit hours.

For more information on the TSAPs in Biology see <u>Single</u> Articulation Pathways - Indiana University Northwest.

Minor in Biology

A biology minor requires a minimum of 18 credit hours in biology. Students must complete one 100 level biology course (e.g. L100 or P130) and at least four (4) additional biology classes at the 200 level and above. Alternatively, a minor can be earned by taking L101, L102, and at least three (3) additional biology classes at the 200 level and above.

Graduate Certificate in Biology

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IU Kokomo, IU Northwest, IUPUI, and IU Southeast.

As a student in the IU Online Graduate Certificate in Biology, you analyze and explore the nature of life and living organisms at an advanced level. You gain the ability to break down and analyze biological concepts for an undergraduate audience, the ability to develop and analyze hypotheses and experiments, a fluency with scientific literature, and a richer understanding of biology in the natural world around us.

Specific areas of focus include:

- Evolution
- Ecology and environmental biology
- Organismal biology
- Cell and molecular biology, and biochemistry
- · Genetics, bioinformatics, and genomics
- Anatomy and physiology
- Developmental biology

Of Special Interest for Dual-credit and Community College Instructors Needing to Meet HLC Standards

The Higher Learning Commission (HLC) requires all high school teachers who teach dual-credit or other college-level courses to hold a master's degree in the field, or to have a master's degree in another area (such as education), plus at least 18 credit hours of graduate coursework in the discipline. The Graduate Certificate in Biology provides these 18 discipline-specific credit hours and prepares you for such careers as:

- Biology dual-credit teacher (high school)
- · Biology instructor (community college)

Certificate Requirements

To earn the Graduate Certificate in Biology, you must complete 18 credit hours.

Required Coursework

To earn the Graduate Certificate in Biology students will complete six graduate biology courses that meet the distribution and breadth requirements described below for a total of 18 credits. All courses are three (3) credit hours unless otherwise noted.

1. Evolutionary Biology (3 cr)

GC Biology students complete the following course:

BIOL-T 570 Evolution

2. Molecular-Cellular Biology (6 cr)

GC Biology students complete two (2) courses selected from this list:

BIOL-T 571 Introductory Biochemistry

BIOL-T 574 The Immune System and Disease

BIOL-T 575 Molecular Biology

BIOL-T 577 Molecular Genetics and Genomics

3. Organismal Biology (6 cr)

GC Biology students complete two (2) courses selected from this list:

BIOL-T 582 Advanced Field Zoology

BIOL-T 583 Problems in Genetics - Higher Organisms BIOL-T 585* Model Organisms in Research (*Counted only once)

BIOL-T 586 Principles of Ornithology

4. GC Biology Capstone (3 cr)

GC Biology students complete one capstone course selected from this list:

BIOL-T 585 Model Organisms in Research

BIOL-T 591 History of Life

BIOL-T 592 Social Implications of Biology

For more information on the Graduate Certificate in Biology see https://online.iu.edu/degrees/biology-certificate.html.

MAT in Biology

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IUPUI, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast. This consortial model allows you to take coursework from several campuses and learn from a wide range of faculty.

The IU Online Master of Arts for Teachers in Biology combines coursework in education and biology to prepare you to be a dual-credit instructor at the high school and community college levels.

The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

Students in the MAT in Biology will cover the following content areas -

Evolution

Ecology / Environmental Biology
Organismal Biology
Cell / Molecular Biology / Biochemistry
Genetics / Bioinformatics and Genomics
Anatomy and Physiology

Developmental Biology

Program Learning Outcomes

Biology Component

Upon completion of the Master of Arts for Teachers in Biology, students will be able to demonstrate:

- 1. Fluency with scientific literature
- 2. Expertise (breadth and depth) in Biology

- Ability to develop and analyze hypotheses and experiments
- 4. An understanding of the impact of Biology on society.

Education Component

Upon completion of the Master of Arts for Teachers in Biology, graduates will be able to—

- 1. Engage in the development of rigorous curriculum planning and design:
- 2. Promote college-level study skills and habits of mind;
- 3. Use assessment data to inform college-level instructional practices;
- 4. Prepare dual-credit students for success in college-level assessments;
- 5. Conduct research to improve dual-credit instruction.

Of Special Interest for Teachers/Instructors Needing to Meet HLC Dual-Credit Standards

The stackable structure of the MAT in Biology is ideal for those who want to teach dual-credit courses and who need to meet Higher Learning Commission dual-credit qualification standards. These standards require teachers wanting to teach dual-credit courses in biology to hold either a master's degree in biology or a master's degree in another discipline (such as education), plus at least 18 credit hours of discipline-specific graduate coursework.

- If you need both discipline-specific coursework and a master's degree, the MAT in Biology meets HLC standards.
- If you already hold a master's degree in a discipline other than biology, you can meet HLC standards by completing the <u>Graduate Certificate in Biology</u>.

MAT Requirements

To earn the MAT in Biology, you must complete 30 credit hours.

The 30 credit MAT in Biology requirements are broken down as follows:

Core course (3 credit hours)
Molecular-cellular electives (6 credit hours)
Organismal electives (6 credit hours)
Capstone Biology course (3 credit hours)
Education component (12 credit hours)
MAT Degree Requirements

I. Biology Component (18 cr)

1. Evolutionary Biology (3 Cr)

To satisfy this requirement, students will complete:

BIOL-T 570 Evolution

2. Molecular-Cellular Biology (6 Cr)

Students complete 2 courses selected from this list:

BIOL-T 571 Introductory Biochemistry

BIOL-T 574 The Immune System and Disease

BIOL-T 575 Molecular Biology

BIOL-T 577 Molecular Genetics and Genomics

3. Organismal Biology (6 Cr)

Students complete two courses selected from this list:

BIOL-T 582 Advanced Field Zoology

BIOL-T 583 Problems in Genetics - Higher Organisms

4.GC Biology Capstone (3 cr)

GC Biology students complete one capstone course selected from this list:

BIOL-T 585 Model Organisms in Research

BIOL-T 591 History of Life

BIOL-T 592 Social Implications of Biology

II. MAT Biology—Education Component (12 cr)

Most IU collaborative MATs include the same four course/12 credit Coursework in Graduate Education.

To fulfill the Education Component of the MAT in Biology, students complete:

- 1) EDUC-H 520 Education and Social Issues
- 2) EDUC-J 500 Instruction in the Context of Curriculum
- 3) EDUC-P 507 Assessment in Schools
- 4) EDUC-Y 520 Strategies for Educational Inquiry
 The Biology component of the MAT in Biology is identical
 to the curriculum of the stand-alone IU collaborative
 Graduate Certificate in Biology.

For more information see https://online.iu.edu/degrees/biology-mat-master.html.

Courses for Nonmajors

The BIOL-L 100 course offers the nonmajor an opportunity to examine the fundamental principles of biology or to prepare for more advanced courses should the student decide 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.

In addition to BIOL-L 100, the following courses can be taken by 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 316, BIOL-L 363, BIOL-L 378, BIOL-L 490 and BIOL-L 499

Chemistry, Biochemistry, Physics, and Astronomy

Phone: (219) 980-6740

Webpage: http://northwest.iu.edu/chemistry/

Program Learning Outcomes for Chemistry and Biochemistry

Goal 1: Students will achieve a solid foundation in all fields of chemistry.

Goal 2: Students will carry out and perform scientific experiments as well as accurately record, analyze and interpret scientific problems including the ability to master scientific writing in chemistry.

Goal 3: Students will be skilled in problem solving, critical thinking, analytic reasoning, and learn to interpret and evaluate scientific findings.

Goal 4: Students in introductory courses will understand the two basic components of the scientific method: theory and experimentation.

Chemistry and Biochemistry

The chemistry major provides an excellent academic background for graduate school; for a career as an industrial chemist; for acceptance into medical, dental,

veterinary or other professional health-related programs; and for positions in chemical instrument sales or chemically related administrative positions. Regardless of which degree track students seek, they are encouraged to take as many chemistry courses as possible above the minimum to enhance their professional skills and employment opportunities.

The biochemistry major, like the chemistry major, has many attractive attributes for potential students. The most significant difference between the chemistry and biochemistry majors is that biochemistry has a focus on chemical aspects of the life sciences in the junior and senior years. Consequently, the major is an excellent choice for students interested in a combination of chemistry and life science.

All bachelor degrees require a minimum of 120 credits hours. The general education (Core) requirements for the B.A. and B.S. degrees must be satisfied along with the credits for the major.

Honors Track: The Chemistry and Biochemistry B.S. degrees have honors tracks. See department advisor for details.

Recommended Minors (15 to 20 credit hours)

Although a minor is not required, it may enhance professional opportunities. Recommended minors: include biology, geosciences, mathematics and or physics. Consult the chemistry department or the appropriate department for details. The interdisciplinary nature of the B.S in Chemistry or Biochemistry is such that a student can make substantial progress in one or more of these listed minors.

About the B.S. Chemistry or Biochemistry Degree

The American Chemical Society certifies the IU Northwest ACS Chemistry degree. Graduates of this program 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 and mathematics courses as major requirements outside of the major required core. An honors sequence is available for the B.S. degree. The Honors Track requires (1) Research, (2) Minimum Chemistry GPA 3.4 and (3) a senior thesis. Consult the department for further detail.

CHEM-C 105, general chemistry, is the introductory chemistry course for science majors. This course has two prerequisites: (1) passing the chemistry placement exam, (2) MATH-M 117 (Intermediate Algebra) with a grade of C or better. Students not meeting these prerequisites will need to take CHEM-C 103 (Principles of Chemistry) and pass it with a grade of C or better or complete the appropriate ALEKS preparatory course before enrolling in CHEM-C 105.

Degree Departmental Requirements

Bachelor of Science

Course	Credits	Chemistry	Biochemistry
CHEM-C 105	3	•	•
CHEM-C 106	3	•	•
CHEM-C 125	2	•	•
CHEM-C 126	2	•	•

CHEM-C 301	1		•		•
CHEM-C 310	5		•		
CHEM-C 341	3		•		•
CHEM-C 342	3		•		•
CHEM-C 343	2		•		•
CHEM-C 344	2		•		•
CHEM-C 361	3		•		
CHEM-C 362	3		•		
CHEM-C 363	2		•		
CHEM-C 409	2		•		•
CHEM-C 410	4		•		
CHEM-C 430	3		•		
CHEM-C 481	3				•
CHEM-C 484	3		•		•
CHEM-C 485	3				•
CHEM-C 487	2				•
CHEMISTRY CR	EDITS	46		34	
PHYS-P 221	5		•		•
PHYS-P 222	5		•		•
PHYSICS CREDI	ITS	10		10	
MATH-M 215	5		•		•
MATH-M 216	5		•		•
MATH-M 311	4		•		
MATH CREDITS		14		10	
BIOL-L 101	4		•		•
BIOL-L 102	4				•
BIOL-L 211	3				•
BIOL-L 312	3				•
BIOL-L 323	3				•
BIOLOGY CRED	ITS	4		17	
ADDITIONAL ST CREDITS	EM	13		10	

PHYS-P 301 can, on alternate years, be substituted for CHEM-C 362. See department advisor for which courses satisfy STEM credits.

About the B.A. Chemistry or Biochemistry Degree

The B.A. degree is intended for students who desire a degree in chemsitry or biochemistry but have an interest in a wider variety of courses in the humanities and social sciences as well as a foreing language.

Degree Departmental Requirements

Bachelor of Arts

Course	Credits	Chemistry	Biochemistry
CHEM-C 105	3	•	•
CHEM-C 106	3	•	•
CHEM-C 125	2	•	•
CHEM-C 126	2	•	•
CHEM-C 301	1	•	•
CHEM-C 310	5	•	
CHEM-C 341	3	•	•
CHEM-C 342	3	•	•
CHEM-C 343	2	•	•
CHEM-C 344	2		•
CHEM-C 361	3	•	

CHEM-C 362 3	
CHEM-C 363 2 •	
CHEM-C 409 2	
CHEM-C 410 4	
CHEM-C 430 3 •	
CHEM-C 481 3	
CHEM-C 484 3 •	
CHEM-C 485 3 •	
CHEM-C 487 2 •	
CHEMISTRY CREDITS 32 29	
PHYS-P 221 5 • •	
PHYS-P 222 5 •	
PHYSICS CREDITS 10 5	
MATH-M 215 5 • •	
MATH-M 216 5 •	
MATH-M 311 4	
MATH CREDITS 10 5	
BIOL-L 101 4 •	
BIOL-L 102 4	
BIOL-L 211 3	
BIOL-L 312 3	
BIOL-L 323 3	
BIOLOGY CREDITS 0 7	
ADDITIONAL STEM 0 6	

At least one course must be chosen from

- CHEM-C 344
- CHEM-C 362
- CHEM-C 410
- CHEM-C 484

Chemistry and Physics courses for STEM credit.

- CHEM-C 303
- CHEM-C 335
- CHEM-C 431
- CHEM-C 441
- PHYS-P 301
- PHYS-P 309
- PHYS-P 331

Advanced science and mathematics courses can also be used for STEM credit. Please consult the department advisor for details.

Minor in Chemistry

The Minor in Chemistry is available to any student who has passed the following courses with a grade of C-(minus) or better.

Requirements (19 credit hours)

- CHEM-C 105
- CHEM-C 125
- CHEM-C 106
- CHEM-C 126
- CHEM-C 341

plus two additional 300 or 400 level chemistry courses of 3 credit hours or more.

Graduate Certificate in Chemistry

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IU Kokomo, IU Northwest, and IU Southeast.

As a student in the IU Online Graduate Certificate in Chemistry, you analyze and explore the chemical processes and principles of organic and inorganic substances. You develop an understanding of multiple subdisciplines of chemistry, and you adopt a methodological approach to problem solving. When you complete the certificate, you will be able to break down chemical concepts and processes, design experiments and assignments to teach chemical concepts, and critically analyze chemistry-related press releases and news.

The 18 cr Graduate Certificate in Chemistry offers coursework in the following areas:

Inorganic chemistry
Organic synthesis
Organic spectroscopy
Physical chemistry
Biochemistry
Environmental chemistry
Nuclear chemistry
GC Chemistry Requirements

1. Chemistry Electives (15 cr)

Students complete five classes chosen from the following list of seven course options:

CHEM-T 510 Inorganic Chemistry (3cr)

CHEM-T 520 Organic Synthesis (3cr)

CHEM-T 530 Organic Spectroscopy (3cr)

CHEM-T 540 Physical Chemistry (3cr)

CHEM-T 550 Introductory Biochemistry (3cr)

CHEM-T 555 Survey in Chemistry VT: Organic, Analytical, Inorganic, etc. (3cr)

CHEM-T 560 Environmental Chemistry (3cr)

CHEM-T 570 Nuclear Chemistry (3cr)

CHEM-T 580 Physical Biochemistry (3cr)

2. Chemistry Capstone (3 cr)

Students complete:

CHEM-T 590 Chemistry Capstone (3 cr)

** Students who also need a Master's degree may stack the Graduate Certificate in Chemistry into a MAT in Chemistry. Contact your faculty advisor for information on this process

MAT in Chemistry

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IU Kokomo, IU Northwest, and IU Southeast.

The 30 credit MAT in Chemistries offers coursework in the following areas:

Inorganic chemistry

Organic synthesis

Organic spectroscopy

Physical chemistry

Biochemistry

Environmental chemistry

Nuclear chemistry

The Chemistry component of the MAT in Chemistry is identical to the curriculum of the stand-alone IU collaborative Graduate Certificate in Chemistry.

Program Learning Outcomes

Upon completion of the Chemistry component of the Master of Arts for Teachers in Chemistry, students will able to demonstrate:

- 1. Expertise in chemistry Students will be able to:
- a. Demonstrate the ability to break down and analyze chemical

concepts and processes.

 b. Demonstrate an achievement of breadth of knowledge across a

selection of sub disciplines in Chemistry.

- c. Design assignments to teach relevant chemical concepts.
- 2.Effective oral and written scientific communication skills Students will be

able to:

- a. Retrieve information from the chemical literature.
- b. Communicate understanding of literature.
- 3.Ability to analyze data critically and to design experiments independently Students will be able to:
- a. Develop methodological approaches and solve problems.
- b. Critically analyze a journal article.
- 4.. Application of the impact of chemistry on the society Students will be able to:
- a. Analyze processes in everyday life using chemical principles.
- b. Demonstrate an awareness of the impact of chemistry on the
- environment, society, and other cultures outside the scientific

community.

c. Evaluate chemistry-related press releases and news media for veracity

and best practices in research.

Upon completion of the Education component of the M.A.T. in Chemistry, graduates will be able to—

- 1.Engage in the development of rigorous curriculum planning and design;
- 2. Promote college-level studies skills and habits of mind;
- 3.Use assessment data to inform college-level instructional practices;
- 4.Prepare dual-credit students for success in college-level assessments:
- 5. Conduct research to improve dual-credit instruction.

MAT Chemistry Degree Requirements

I. Chemistry Component—consists of six classes divided into two requirements.

1. Chemistry Electives (15 cr)

Students complete five classes chosen from the following list of seven course options:

CHEM-T 510 Inorganic Chemistry (3cr) CHEM-T 520 Organic Synthesis (3cr) CHEM-T 530 Organic Spectroscopy (3cr) CHEM-T 540 Physical Chemistry (3cr)

CHEM-T 550 Introductory Biochemistry (3cr)

CHEM-T 555 Survey in Chemistry VT: Organic, Analytical, Inorganic, etc. (3cr)

CHEM-T 560 Environmental Chemistry (3cr)

CHEM-T 570 Nuclear Chemistry (3cr)

CHEM-T 580 Physical Biochemistry (3cr)

2. Chemistry Capstone (3 cr)

Students complete:

CHEM-T 590 Chemistry Capstone (3 cr)

II. Education Component (12 cr)

Most IU collaborative MATs include the same four course/12 credit Coursework in Graduate Education.

To fulfill the Education Component of the MAT in Chemistry, students complete:

- 1) EDUC-H 520 Education and Social Issues
- 2) EDUC-J 500 Instruction in the Context of Curriculum
- 3) EDUC-P 507 Assessment in Schools
- 4) EDUC-Y 520 Strategies for Educational Inquiry

Other Introductory Chemistry Courses

These courses can be used to fulfill science general education requirements or requirements in health fields such as nursing and dental hygiene. Students in the health fields should contact their program administrators to verify. CHEM-C 101 and CHEM-C 121 are excellent preparatory in courses in chemistry for students majoring in the sciences.

- CHEM-C 100 (The World of Chemistry, 3 cr)
- CHEM-C 103 (Principles of Chemistry, 5 cr)
- CHEM-C 110 (The Chemistry of Life, 3 cr)
- CHEM-C 120 (Chemistry Laboratory, 2 cr)

Courses for ACS Degree (B.S.). Degree

The ACS B.S. degree in chemistry is certified by the American Chemical Society. Students seeking this certification must take at least one semester of biochemistry (CHEM-C484).

TSAP in Chemistry - B.A.

Completion of an eligible AS or AA degree at Ivy Tech or Vincennes may put you on a Single Articulation Pathway to a BA or BS at IU Northwest, without a loss oc credit hours.

For more information on the TSAP in Chemistry see <u>Single Articulation Pathways - Indiana University</u> Northwest.

Physics

The Physics program does not offer a major but does offer a minor in physics.

Minor in Physics

Requirements (16 credit hours).

Two sequences are available to the student: calculus and non-calculus. Students seeking the physics minor are encouraged to discuss their course schedule with the department.

Course	Credit	Calculus	Algebra
PHYS-P 201	5		•

PHYS-P 202	5		•
PHYS-P 221	5	•	
PHYS-P 222	5	•	
PHYS-P 301	3	•	•
PHYS-P 309	2	•	•
PHYS-P 406	1 or 2	•	•
Credits		16 or 17	16 or 17

See department advisor for other courses that might apply to the physics minor.

Physics and Astronomy Courses for Non-Majors

The following courses are intended for students not majoring in the sciences. They assume little or no background in science or mathematics. PHYS-P 101 can serve as an excellent preparatory course for PHYS-P 201 or PHYS-P 221. All courses listed can be used to satisfy divisional distribution requirements as well as prepare students for 200 level general physics.

- PHYS-P 101 (Physics in the Modern World, 4 cr)
- AST-A 100 (The Solar System, 3 cr)
- AST-A 105 (Stars and Galaxies, 3 cr)
- AST-A 200 (Introduction to Cosmology, 3 cr)

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. Please see Geosciences for further details.

Computer Information Systems

Phone: 219-980-6638

Website: http://www.northwest.iu.edu/cis/

B.S. in Computer Information Systems (CIS)

Learning Outcomes

- Apply knowledge of computing appropriate to the discipline.
- Solve problems (programming, networking, database, and Web design) in the Information Technology environment.
- Demonstrate ethical and professional behavior.
- Discuss IT-oriented security issues and protocols.
- Evaluate and maintain network environments.
- · Communicate effectively with a range of audiences.

Requirements

Group Va Major—Computer Information Systems Core (45 cr.)

- CSCI-C 106 (3 cr.)
- CSCI-C 150 (3 cr.)
- CSCI-A 106 (3 cr.)
- CSCI-A 247 (3 cr.)
- CSCI-A 285 (3 cr.)

Select one of the following programming options:

option A

- CSCI-A 201 (4 cr.)
- CSCI-A 302 (4 cr.)
- option B
 - CSCI-C 201 (4 cr.)
 - CSCI-C 307 (3 cr.)
- option C
 - CSCI-A 210 (4 cr.)
 - CSCI-A 346 (3 cr.)

All of the following:

- CSCI-C 330 (3 cr.)
- CSCI-C 430 (3 cr.)
- CSCI-C 442 (3 cr.) or INFO-I 421 (3 cr.)
- INFO-I 402 (3 cr.)

Select one of the following for the capstone requirement:

- CSCI-Y 398 (1-6 cr.)
- CSCI-C 390 (1-6 cr.)

CIS Electives to complete 45 credit hours.

Group Vb

 Complete ENG-W231, MATH-M118, and PSY-K 300 (C- or better is required)

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 CSCI-A 213 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).

Group VI: Minor

 Students must select a minor in any area. (A business, SPEA, or Health Information Management 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.

- Each CIS internship is awarded 1 credit hour per semester.
- Consult the department chairperson for specific details concerning registration requirements, and check with Career Services for internship opportunities.

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

B.S. in Informatics (INFO)

Program Learning Outcomes

- 1. Foundations of Informatics and Computing
- 2. Problem solving and programming
- 3. Analysis and design of large systems
- Collaboration and teamwork with emphasis on virtual teams
- 5. Societal and ethical implications of informatics
- Application of Informatics skills to another area of specialization (cognate)

Requirements

Students must complete the general requirements of the College of Arts and Sciences. This includes at least 120 total credit hours, at least 36 credit hours at the 300 and 400 level, and at least 105 credit hours of COAS courses.

Group Va-Major (55-58 cr.)

The major requirements are organized into three categories:

Informatics Core (34 cr.)

Informatics Electives (6 cr.)

Tract 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 Senior Thesis I/II (3 & 3 cr.)
- INFO-I 491 Capstone Project Internship (1 cr. may be repeated up to 6 cr.)

Total (34 cr.)

Electives (6 cr.)

Tract Area (15-18 credit hours)—Select one Tract Area

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

Group Vb

Complete the following courses (C- or better required):

- ENG-W 231
- MATH-M 118 or MATH-M 119
- PSY-K 300

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

TSAP in Informatics - B.S.

Completion of an eligible AS or AA degree at Ivy Tech or Vincennes may put you on a Single Articulation Pathway to a BS at IU Northwest, without loss of credit hours.

For more information on the TSAP in Informatics see <u>Single Articulation Pathways - Indiana University</u> Northwest

B.S. in Informatics (INFO) ONLINE Learning outcomes

The learning outcomes relate to six primary categories:

- 1. Design and develop solutions to problems.
- 2. Construct memory-based structures and algorithms.
- Design and implement databases for disciplinespecific problems.
- 4. Design and evaluate user interfaces, integrating users' needs and requirements.
- Evaluate social, legal, or ethical issues in Informatics.
- Demonstrate the skills, behaviors, and attitudes necessary to function as an effective team member.
- 7. Communicate effectively across multiple contexts.

Degree Requirements

To graduate with the BS in Informatics, you must complete a total of 120 semester credit hours, broken down as follows. You may be able to transfer an associate degree or up to 64 credit hours from a regionally accredited two-year college and up to 90 credit hours from a regionally accredited four-year college or university.

The B.S. Informatics curriculum includes the following five components:

- 1. Informatics core courses (39 credit hours)
- 2. Informatics electives (9 credit hours)
- 3. Track courses (15-18 credit hours)
- 4. General education courses (30-42 credit hours)
- 5. General electives (12-27 credit hours)

Required Courses

I. Informatics Core (13 courses/39 credits)

1. INFO-C I 00 Informatics Foundations (3 er.)

2. INFO-C 112 Tools of informatics: Programming and Databases (3 er.)

3. INFO-C 201 Mathematical Foundations of Informatics (3 er.)

4. INFO-C 203 Social Informatics (3 er.)

5. INFO-C 210 Problem Solving and Programming I (3 er.)

6. INFO-C 211 Problem Solving and Programming 2 (3 er.)

7. INFO-C 300 Human Computer Interaction (3 er.)

8. INFO-C 307 Data Representation and Organization (3 er.)

9. INFO-C 399 Database Systems (3 er.)

10. INFO-C 413 Web Design and Development (3 er.)

11. INFO-C 450 System Design (3 er.)

12. INFO-C 451 System Implementation (3 er.)

13. INFO-C 452 Project Management (3 er.)

II. Informatics electives (3 courses/9 credits)

Complete three from the following

INFO-C342 Mobile Application Development

INFO-C421 Applications of Data Mining

INFO-C453 Computer and Information Ethics

INFO-C416 Applied Cloud Computing

NFO-I303 Organizational Informatics

INFO-I310 Multimedia Arts and Technology

INFO-I441 Interaction Design Practice

INFO-I459 Media and Tech Entrepreneurship

Any 300#or 400 online INFO/CSCI course(s)

III. BS Informatics Track complete one of the following:

Students are required to choose one of the following tracks:

Business track (18 credits)

Coursework will provide instruction in several areas of business and business management, including accounting, bookkeeping, marketing, human resource management, financial management, and supply chain management.

1. Accounting

Complete one of the following

BUS-A201 Introduction to Financial Accounting BUS-A202 Introduction to Managerial Accounting

2. Business Management

BUS-J404 Business and Society

3. Marketing

Complete one of the following

BUS-M300 Introduction to Marketing

BUS-M301 Introduction to Marketing Management

4. HR Management

BUS-Z440 Personnel: Human Resource Management 5. Financial Management

Complete one of the following

BUS-F301 Financial Management

BUS-F302 Financial Decision Making

6. Operations/Supply Chain Management Complete one of the following

BUS-P301 Operations Management

BUS-P421 Supply Chain Management

Health Information Management track (15-18 credits)

Coursework will provide instruction in several areas of health information management, including ethics, communication, confidentiality, and data analysis. Students will learn to follow standards of a professional healthcare environment, and to effectively and accurately analyze healthcare information.

1. Medical Terminology Complete one of the following

HIM-M330 Medical Terminology

HIM-M195 Medical Terminology

AHLT-M195 Medical Terminology

AHLT-M330 Medical Terminology

2. Introduction to Health Information Management Complete one of the following

HIM-M108 Introduction to Health Information Management HIM-M101 Introduction to Health Records

AHLT-M192 Introduction to Health Information

Management and Reimbursement

AHLT-M392 Introduction to Health Information

Management and Reimbursement

3. Healthcare Information Requirements and Standards Complete one of the following

HIM-M325 Healthcare Information Requirements and Standards I

HIM-M301 Healthcare Quality and Information Management

4. Analysis of Health Information

Complete one of the following

HIM-M425 Quantitative Analysis of Health Information HIM-M107 Computer Applications in Health Information Technology

 Pathophysiology & Pharmacology* (complete 2)

HIM-M350 Pathophysiology and Pharmacology for HIM I HIM-M351 Pathophysiology and Pharmacology for HIM II

6. Electronic Health Records*

HIM-M410 Computer Systems in Healthcare *Students can choose between either the Pathophysiology & Pharmacology requirement OR the Electronic Health Records requirement

Legal Informatics track (15 credits)

Students will study several skill areas necessary in legal informatics, including specialized technology, handling evidence, information governance, security, privacy, and protection of intellectual property. Students will assist with presenting a legal case in court.

Complete the following five classes:

- 1. INFO-C401 Foundations in Legal Informatics
- 2. INFO-C402 Legal and Social Informatics of Security
- 3. INFO-C403 Electronic Discovery
- 4. INFO-C404 Litigation Support Systems and Courtroom Presentations
- 5. INFO-C405 Technology and the Law

Enterprise Resource Planning (ERP) Track (18 credits)

1. Accounting

BUS-A201 Introduction to Financial Accounting

2. Information Systems

BUS-K321 Management of Information Technology 3. Functional Areas of Business Complete two of the following

BUS-M300 Introduction to Marketing BUS-F301 Financial Management BUS-P301 Operations Management BUS-P421 Supply Chain Management 4. ERP Operations

BUS-K301 Enterprise Resource Planning 5. ERP Programming and Configuration Complete one of the following

BUS-K440 Business Intelligence BUS-S435 Advanced Topics in Computer Information Systems

Sustainability Track (15 credits)

1. Foundations

5. Elective

SUST-S301 Foundations of Sustainability Studies 2. Science Courses
Complete one of the following

AHLT-H331 Environmental Health
GEOL-G185 Global Environmental Change
GEOG-G315 Environmental Conservation
GEOL-G400 Energy: Sources and Needs
GEOL-G476 Climate Change Science
3. Social Sciences, Cultural, Economics Courses
Complete one of the following
BUS-B399 Business and Society
GEOG-G338 Geographic Information Systems
PHIL-P306 Business Ethics
POLS-Y308 Urban Politics
SOC-S308 Global Society
SUST-B399 Sustainable Food Systems
4. Practicum
SUST-S490 Sustainability Practicum

Complete one additional course from either Science Courses or Social Sciences, Cultural, or Economics Courses

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.

Requirements in Department of Fine Arts Va (25 cr.)

- Select one of the following:
 - FINA-F 100 Fundamental Studio-Drawing (3 cr.)
 - FINA-F 102 Fundamental Studio-2D (3 cr.)
- FINA-S 250 Introduction to Design Practice (3 cr.)
- FINA-S 351 Typography (3 cr.)

- FINA-S 352 Production for Graphic Design (3 cr.)
- FINA-S 353 Graphic Design IV (3 cr.)
- FINA-S 413 Typography (2 cr.)
- FINA-S 414 Layout and Design (2 cr.)
- FINA-S 415 Package Design (2 cr.)
- FINA-S 451 Graphic Design Problem Solving (3 cr.)
- FINA-S 497 Capstone Independent Study in Fine Arts (1-3 cr.)

Requirements in Department of Fine Arts Vb (8 cr.)

- 3 credit hours in the FINA-A100 series (history of art)
- 3 credit hours of 300 or 400 level art history
- FINA-A435 CAPSTONE Art Theory (2 cr.)

Requirements in Computer Information Systems (18 cr.)

- CSCI-A 106 Introduction to Computing (3 cr.)
- CSCI-A 251 Introduction to Digital Imaging Application (3 cr.)
- CSCI-A 348 Mastering the World Wide Web (3 cr.)
- INFO-N 248 Design Principles in Web Design (3 cr.)
- INFO-N 215 Online Document Development (3 cr.)
- · Select one of the following:
 - CSCI-A 340 An Introduction to Web Programming (3 cr.)
 - or INFO-I 310 Multimedia Arts and Technology (3 cr.)
 - or INFO-I 400 Topics in Informatics (3 cr.)
 - or CSCI-C 390 Individual Programming Lab (3 cr.)

Total (51 cr.)

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

In addition to the preceding courses the students are responsible for fulfilling the general requirements of the College of Arts and Sciences.

There is a Bachelor of Arts version of this interdepartmental degree. See the Fine Arts Department section for details. schools/coas/departments/fine-arts/ major-cis-arts

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 simulation 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 (22-24 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 (22-24 cr.)

Computer Information Systems (21-23 cr.)

- CSCI-C 106 (3 cr.)
- CSCI-C 150 (3 cr.)
- · Select one of the following
 - CSCI-C 201 (4 cr.) and CSCI-C 307 (3 cr.)
 - CSCI-A 201 (4 cr.) and CSCI-A 302 (4 cr.)
- CIS or Informatics elective @ 300 level or above (3-4 cr.)
- CSCI-C 410 (3 cr.)
- CSCI-C 390 (1-3 cr.)
 - · Capstone course requirement
 - Select one of the following: CSCI-C 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 (CSCI-Y 398) 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.

B.S. in Data Science (ONLINE)

In the Information Age, enormous amounts of data are generated every day in a range of areas, including social media, search engines, insurance companies, healthcare organizations, hospitals, defense, and retail. Data science is now a rapidly growing, high-paying field.

As a student in the IU Online BS in Data Science, you collect, organize, and analyze data to make meaningful conclusions. You write programs to perform data analysis on large, complex datasets. You evaluate the social, legal, and ethical issues that arise from the mass collection of data.

Specific areas of focus include:

- · Data acquisition and storage
- Data exploration and curation
- · Data modeling and analysis

- Data visualization and presentation
- · Data ethics and governance

Your IU Online BS in Data Science prepares you for such careers as:

- · Business intelligence analyst
- Data mining engineer
- · Data architect
- Data scientist
- · Analytics manager
- · Research analyst
- · Information officer

This 100 percent online, consortial program is taught by IU East, IUPUI, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast. This consortial model allows you to take coursework from several campuses and learn from a wide range of faculty.

Learning Outcomes

- 1. Data Acquisition and Storage
- Capture and organize different types of data from different sources as performed in a variety of industries.
- Manage data, data infrastructures, and the data science pipeline.
- Store and process data using distributed computing, overcoming issues with the process of data extraction, transformation, and loading.
- 2. Data Exploration and Curation
- Use metadata and indexing for data discovery, description, information retrieval, and reusability.
- Perform data transformations with justifications.
- Clean and recode data to prepare it for analysis using a variety of techniques.
- 3. Data Analysis and Modeling
- Apply quantitative techniques, including probability, statistics, optimization, machine learning, and simulation to deploy models for prediction and analysis.
- Write programs to perform data analysis on large, complex datasets.
- 4. Data Visualization and Presentation
- Assess the purpose, benefits, and limitations of visualization as a human-centered data analysis methodology.
- Design and implement effective visualizations for a variety of data types and analytical tasks to reveal insights and communicate information.
- 5. Data Ethics and Governance
- Evaluate social, legal, and ethical issues in data science, applying ethical principles to resolve conflicts
- Support the ethical and appropriate use of technology by following a code of conduct.

Degree Requirements

To earn the BS in Data Science, you must complete 120 credit hours.

Requirements are broken down as follows:

- Data science core courses, including capstone course (43 credit hours)
- Professional communication courses (6 credit hours)
- Computer science courses (11 credit hours)
- · Mathematics courses (9 credit hours)
- Statistics courses (9 credit hours)
- General education courses and electives, as needed to reach 120 credit hours.

General education:

 Students need to follow their home campus's general education requirements (that probably include any requirements related to grade).

Professional Communication (6 cr.)

- Professional Speaking (3 cr.) Choose one:
- CMLC-C 122 Interpersonal Communication (3 cr.)
- COMM-C 180 Interpersonal Communication (3 cr.)
- COMM-C 223 Business and Professional Communication (3 cr.)
- SPCH-S 122 Interpersonal Communication (3 cr.)
- SPCH-S 223 Business and Professional Communication (3 cr.)
- Professional Writing (3 cr.) Choose one:
- ENG-W 230 Science Writing (3 cr.)
- ENG-W 231 Professional Writing (3 cr.)
- ENG-W 233 Technical Writing/Intermediate Expository Writing (3 cr.)
- · ENG-W 234 Technical Reporting Writing
- ENG-W 270 Argumentative Writing (3 cr.)

Computer Science (11 cr.)

- CSCI-A 201 Programming 1 (taught using Python) (4 cr.)
- CSCI-A 202 Programming II (taught using Python) (4 cr.)
- Data Structures: CSCI-C 343 Data Structures (taught using Python) (3 cr.)

Mathematics (9 cr.)

- MATH-M 220 Calculus for Data Science 1 (3 cr.)
- MATH-M 230 Calculus for Data Science II (3 Cr)
- MATH-M 301 Linear Algebra and Applications (3 cr.) OR MATH-M 303 Linear Algebra (3 cr.)

Statistics (9 cr.)

- PBHL-B 275 Probability without Tears and Without Calculus (taught using Python)
- PBHL-B 302 Introduction to Biostatistics (3 cr.) (pre-req: at least college algebra) or PBHL-B 285 Classical Biostatical Regression Learning (3 cr.)

 PBHL-B 420 Introduction to Statistical Learning (3 cr.) Or INFO-I 415 Introduction to Statistical Learning (3 cr.)

Data Science-Core (30 cr.)

- CSCI-N 211 Introduction to Database; OR CSCI-A 213 Database Applications
- CSCI-N 311 Database Programming, Oracle; OR CSCI-B 461 Database Concepts; OR CSCI-C 442 Database Systems; OR INFO-I 308 Information Representation
- CSCI-N 317 Computation for Scientific Applications
- INFO-I 223 Data Fluency
- INFO-I 416 Applied Cloud Computing for Data Intensive Sciences
- INFO-I 421 Applications of Data Mining
- INFO-I 453 Computer and Information Ethics
- INFO-I 490 Professional Internship (3 cr); OR INFO-I 491 Capstone
- NEWM-N 328 Visualizing Information
- PBHL-B 452 Fundamentals of Health Data Management

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.

Minor in Informatics

Requirements

Students wanting to minor in Informatics are requried to take a minimum of 15 cr. hrs. including:

- INFO-I 101 Introduction to Informatics (4 cr.)
- additional INFO-I courses 200-400 level to total at least 11 cr. These courses should be chosen with the advise and consent of the Department of Computer Information Systems.

Total (15 cr.)

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 with a

grade of C- or better: ENG-W 131 and ENG-W 231 and MATH-M 118.

Requirements

- CSCI-C 106 (3 cr.)
- CSCI-A 106 (3 cr.)
- CSCI-C 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.

M.S. in Computer Information Systems (CIS)

Program Description and Admission

The Master of Science in Computer Information Systems program is designed for students who desire to advance their careers in information technology. The Master of Science (MS) in Computer Information Systems (CIS) consists of 30 credit hours with a minimum grade of B- in each course and a 3.0 overall GPA. A project/internship component of 3 credit hours is part of the core requirements. Students will complete all the core requirements of 18 credit hours and choose 12 credit hours of electives offered based on faculty expertise and market demands. The department may offer additional electives from time to time. A full-time student could complete the Master's degree in two years.

To be considered for admission to the MS in CIS program, students must hold a bachelor's degree from an accredited institution in any field. If the field of major is related to CIS, students are eligible to be admitted directly into the graduate program. If the field of major is not related to CIS, students will be admitted conditionally.

Students should have obtained an undergraduate grade point average of at least 3.0. Students with a GPA slightly below 3.0 who are returning to college with relevant work experience may be admitted if their applications contain sufficient evidence of their skills and ability to succeed in graduate work.

Graduate Record Examination (GRE) scores are not required. Applications will be reviewed on a rolling basis.

For questions, contact: Dr. Bhaskara Kopparty, Computer Information Systems Department: 219-980-6638, or come visit us: Hawthorn Hall, Room 325.

Program Objectives/Outcomes

The objective of this program is to prepare graduates with a sound basic understanding of computers coupled with knowledge of systems and applications in computer science. The coursework will cover advanced applications and will prepare students for employment at an advanced level.

Graduates from the MS in CIS program will be informed critical thinkers, be proficient in their chosen medium, and have advanced knowledge of computer information systems.

This Master's degree can prepare students for continued advance study, including doctoral degrees in computer science or informatics. Students with a Bachelor's degree will find the MS in CIS as a path to advanced employment in a number of IT related occupations, such as business analyst, data analyst, information security analyst, computer and information systems analyst, and project manager. Each of these occupations currently is in high demand.

The goals of this Master's degree are to develop proficiency in the practice of computing and to prepare students for professional leadership roles. Each graduate should be able to:

- Formulate solutions to computing problems
- Analyze and compare alternative solutions to computing problems
- Design and implement effective solutions to computing problems
- Apply sound principles to the synthesis and analysis of computer systems
- Work effectively in teams to design and implement solutions to computational problems
- · Communicate effectively, both orally and in writing
- Think critically and creatively, both independently and with others
- Recognize the social and ethical responsibilities of a professional working in the discipline
- Seek out, develop, and adapt to new developments in the field of computer science

Curriculum

Core Courses - 18 credit hours

- Introduction to Artificial Intelligence (CSCI B551) 3 credit hours
- Information Systems Development (CSCI P532) 3 credit hours
- System and Protocol Security & Information Assurance (INFO I533) – 3 credit hours
- Advanced Web Page Development (CSCI C605)– 3 credit hours
- Informatics Project Management (INFO B505) 3 credit hours
- Independent System Development (CSCI Y790) 3 credit hours

Elective Courses - 12 credit hours

Electives: At least half of all Elective credits must be in courses numbered 600 or above.

- Data Analysis Using R (CSCI C504) 3 credit hours
- Business Intelligence Using SAP (CSCI C603) 3 credit hours
- Predictive Analytics and Data Mining (CSCI B565) 3 credit hours
- UNIX/LINUX Administration (CSCI C606)

 3 credit hours
- Topics in Systems (CSCI B649) 3 credit hours

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 CSCI-A 213 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).

B.S. in Computer Science (Online) Program Learning Outcomes

Goal A: Problem-solving

 A1: Students will analyze and design algorithmic solutions to real-world problems.

- A2: Students will utilize programming languages to implement and test algorithms.
- A3: Students will choose appropriate data structures and algorithms for solving problems.

Goal B: Developing software systems /computing-based solutions

- B1: Students will develop software systems using a minimum of two high-level programming languages.
- B2: Students will design/develop software systems by applying knowledge of

databases and software engineering skills following the software development lifecycle.

• B3: Students will apply computer architecture elements to design and implement operating system(s) components.

Goal C: Communication, Teamwork, and Diversity

- C1: Students will communicate effectively in a variety of professional contexts.
- C2: Students will demonstrate the necessary interpersonal skills to work effectively in diverse and/or multi-disciplinary teams.
- C3: Students will make informed judgments in computing practice based on legal and ethical principles.

To earn the IU Collaborative B.S. in Computer Science with complete 70-72 credits in four course categories:

- I. Math Core (four courses/16 credits)
- II. Computer Science Core (ten courses/40 credits).
- III. Science Core (three or four courses/ 8-10 credits)
- IV. Electives (two courses/6 credits)

Students falling short of 70 credits can take an additional CSCI elective.

Required Courses:

Math Core

1. Calculus (10 credits)

Complete the two-course sequence MATH-M 215 Calculus I and MATH-M 216 Calculus II

2. Linear Algebra (3 credits)

Complete one of the following

MATH-M 301 Linear Algebra and Application MATH-M 303 Linear Algebra

3. Statistics (3 credits)

Complete one of the following:

MATH-K 300 Statistical Techniques MATH-K 310 Statistical Techniques

Computer Science Core

1. Programming I (4 credits)

CSCI-C 155 Computer Programming I

2. Programming II (4 credits)

CSCI-C255 Computer Programming II

3. Data Structures (4 credits)

Complete one of the following

CSCI-C243 Introduction to Data Structures CSCI-C343 Data Structures

4. Algorithms (3 credits)

CSCI-C455 Analysis of Algorithms I

5. Operating Systems (3 credits)

Complete one of the following

CSCI-C436 Introduction to Operating Systems

CSCI-C435 Operating Systems

6. Computer Structures (4 credits)

CSCI-C335 Computer Structures

7. Programming Languages (3 credits)

CSCI-C311 Programming Languages 8. Discrete Structures (3 credits)

Complete one of the following

CSCI-C 241 Discrete Structures for Computer Science CSCI-C 251 Foundations of Digital Computing

9. Software Engineering

Complete one of:

CSCI-C308 System Analysis and Design

CSCI-C330 Object Oriented System Analysis and Design

11. Computer Networks or Computer Security (3 credits)

Complete one of the following:

CSCI-B438 Fundamentals of Computer Networks

CSCI-A447 Advanced Networking System Administration

CSCI-B451 or C490 Security in Computing /Security of **Networked Systems**

CSCI-C437 Computer Security

CSCI-A347 Computer and Network Security Essentials

**Computer Networks and Computer Security topics not chosen can be uses as electives.

12. Capstone or Internship (3 credits)

Complete one of the following

CSCI-Y398 Internship in Professional Practice 3 COAS-S399 INTERNSHIP CSCI-Y398 Internship in Professional Practice

13. Database Systems (3 credits)

CSCI-C442 Database Systems 3

Science Core

Complete one of the following five sets of courses in Chemistry, Biology, Physics, or Geology. Must include one lecture and one lab.

Option 1 Chemistry

CHEM-C105 Principles of Chemistry II (or equivalent) CHEM-C125 Experimental Chemistry I (or equivalent) CHEM-C106 Principles of Chemistry II (or equivalent) Option 2 Biology

BIOL-L101 Intro to Biological Science I (or equivalent) BIOL-L102 Intro to Biological Science II (or equivalent) Option 3 Physics

PHYS-P201 General Physics 1 (or equivalent) PHYS-P202 General Physics 2 (or equivalent) Option 4 Physics

PHYS 15200 Mechanics (or equivalent) PHYS 25100 Heat Electricity and Optics (or equivalent) Option 5 Geology

GEOL-G101 Introduction to Earth Science: Lecture GEOL-G102 Introduction to Earth Science Laboratory GEOL-G107 Two additional GEOL Classes to total 8-10 credits

GEOL-XXX Two additional GEOL Classes to total 8-10 credits

Electives (two courses/6 credits)

Computing Theory Elective

Complete one of the following

CSCI-B401 Fundamentals of Computing Theory CSCI-B401 Fundamentals of Computing Theory Artificial Intelligence Elective

CSCI-C463 Artificial Intelligence Graphics Elective

CSCI-C481 Interactive Computer Graphics Data Mining Elective

Complete one of the following

CSCI-C490 Data Mining INFO-I421 Applications of Data Mining Free electives

Complete any one of the following

CSCI-C490 Seminar in Computer Science (variable topic) CSCI-C490 Seminar in Computer Science (variable topic)

CSCI-B424 Parallel and Distributed Programming

CSCI-C431 Assemblers and Compilers I

CSCI-C458 Intelligent Robots

CSCI-P422 Web Enterprise Systems

CSCI-C407 Introduction to Digital Forensics

CSCI-B439 Network Security

Minor in Cybersecurity

Requirements

- CSCI-A 247 (3 cr.)
- CSCI-A 347 (3 cr.)
- BUS-K 221 (3 cr.)
- BUS-K 321 (3 cr.)
- SPEA-J 303 (3 cr.)

Total (15 cr.)

Graduate Certificate in Computer Science (Online)

IU faculty developed this six-course curriculum to promote excellence in computer instruction to help dual credit instructors meet their professional goals, and in turn, to improve the learning outcomes and classroom experiences of their beginning Computer Science students.

The six-courses required for the Graduate Certificate in Political Science are identical to the computer science component in M.A.T. in Computer Science. Certificate students can stack their computer science coursework into the M.A.T. should they opt to pursue the master's degree.

Requirements

To earn the IU collaborative Graduate Certificate in Computer Science students much complete the following six courses (18 credit hours):

- CSCI-T 500 CS Foundations
- CSCI-T 510 Introduction to Computing and Programming
- CSCI-T 520 Introduction to Software Systems
- INFO-T 530 Introduction to Informatics
- CSCI-T 540 Introduction to Data Science
- CSCI-T 550 Introduction to Cybersecurity

M.A.T. in Computer Science (Online)

IU faculty developed this curriculum to promote excellence in computer instruction to help dual credit instructors meet their professional goals, and in turn to improve the learning outcomes and classroom experiences of their beginning Computer Science students.

The M.A.T. in Computer is a stackable degree—it combines the six required courses of the Graduate Certificate in Computer Science with four School of Education courses providing advanced subject area expertise and graduate-level study in curriculum and pedagogy.

Program Learning Outcomes

Upon completion of the computer science component of the Master of Arts for Teachers in Computer science, students will able to demonstrate fluencies in all core concepts identified in the ACM sponsored K-12 Computer Science Framework, including:

- 1. Computational Thinking
- a. Identify complex, interdisciplinary, real-world problems that can be solved computationally.
- b. Decompose complex real-world problems into manageable subproblems that could integrate existing solutions or procedures.
- c. Evaluate whether it is appropriate and feasible to solve a problem computationally.
- 2. Develop and Use Abstractions
- a. Identify complex, interdisciplinary, real-world problems that can be solved computationally.
- Decompose complex real-world problems into manageable subproblems that could integrate existing solutions or procedures.
- c. Evaluate whether it is appropriate and feasible to solve a problem computationally.
- 3. Create Computational Artifacts
- a. Plan the development of a computational artifact using an iterative process that includes reflection on and modification of the plan, taking into account key features, time and resource constraints, and user expectations.
- b. Create a computational artifact for practical intent, personal expression, or to address a societal issue.
- c. Modify an existing artifact to improve or customize it.
- d. Systematically test computational artifacts by considering all scenarios and using test cases.
- e. Identify and fix errors using a systematic process.
- f. Evaluate and refine a computational artifact multiple times to enhance its performance, reliability, usability, and accessibility.
- 4. Data
- a. Understand computational data representation, including conventions and standards for manipulating text, image, sound and numenc processmg
- b. Gather, prepare and manipulate reasonable datasets, calculate descriptive statistics, explore linear correlations and communicate analysis in compelling visualizations
- c. Be able to construct and analyze a model for a simple process and execute it in a simulation.
- 5. Programming
- a. Demonstrate fluencies in key programming constructs, such as event triggers, control structures, variables, data types, modularity and data structures
- b. Demonstrate de-bugging strategies
- c. Be able to operate in block and text-based programming languages
- d. Participate in a software peer review
- e. Be able to move a software product from design through post mortem
- f. Demonstrate responsibility and stewardship around the impact of computer science on society

- g. Include the unique perspectives of others and reflect on one's own perspectives when designing and developing computational products.
- h. Address the needs of diverse end users during the design process to produce artifacts with broad accessibility and usability.
- i. Employ self- and peer-advocacy to address bias in interactions, product design, and development methods.
- J. Be able to identify defensive cybersecurity strategies
- k. Engage in and advocate for digital ethics and best practices

Upon completion of the Education component of the M.A.T. in Computer science, graduates will be able to:

- 1. Engage in the development of rigorous curriculum planning and design;
- 2. Promote college-level studies skills and habits of mind;
- 3. Use assessment data to inform college-level instructional practices;
- 4. Prepare dual-credit students for success in college-level assessments;
- 5. Conduct research to improve dual-credit instruction

Requirements

To earn the MAT in Computer Science students much complete the six course/18 credit computer science track and the four course/12 credit graduate education component.

The ten require courses for the M.A.T. for Teachers in Computer Science are:

Computer Science Component (18 credit hours)

- CSCI-T 500 CS Foundations
- CSCI-T 510 Introduction to Computing and Programming
- CSCI-T 520 Introduction to Software Systems
- INFO-T 530 Introduction to Informatics
- CSCI-T 540 Introduction to Data Science
- CSCI-T 550 Introduction to Cybersecurity

Graduate School of Education Component (12 credit hours)

- EDUC-J 500 Instruction in the Context of the Curriculum
- EDUC-H 520 Education and Social Issues
- EDUC-P 507 Assessment in Schools
- EDUC-Y 520 Strategies for Educational Inquiry

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.

Minor in Economics

Requirements

- ECON-E 201 (3 cr.)
- ECON-E 202 (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 15 credit hours

Total (15 cr.)

English

Courses

Phone: (219) 980-6565

Website: https://northwest.iu.edu/english/

The English department offers a variety of courses in grammar and language (ENG-G), literature (ENG-L), and writing (ENG-W). English courses at the 100, 200, 300, and 400 levels are for undergraduates while 500-600 level courses are reserved for graduate students. Undergraduates should *not* enroll in any English course at the 500 or 600 level without written permission from both

the instructor and department chair.

Composition

Courses in composition include ENG-W 130 and ENG-W 131. Students are not permitted to register for ENG-W 131 until they have taken the English placement exams administered by Admissions. On the basis of their placement test scores, students may be counseled to take ENG-W 130 prior to ENG-W 131.

Students should confer with an advisor about the course that best suits them. Students may also contact the Director of Writing at (219) 980-6569 for further advising. They should also consult the Bulletin under Placement Testing and Assessment.

Writing

Courses in writing include ENG-W 206, ENG-W 231, ENG-W 280, ENG-W 301, ENG-W 302, ENG-W 303, ENG-W 311, 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, 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 215, ENG-L 216, ENG-L 217, ENG-L 218, ENG-L221, ENG-L249, and 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 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, ENG-G 304, and ENG-G 315.

Program Learning Outcomes

- Students will practice various reading and analytical strategies.
- 2. Students will practice effective communication.
- Students will develop writing for different audiences, genres, and/or rhetorical situations.
- Students will engage with contextually informed arguments.
- 5. Students will develop an appreciation for the diverse cultures and identities that produce literature.

Major in English - Bachelor of Arts (B.A.)

Learning Outcomes

- Students will develop a wide knowledge of the history and traditions of literature written in the English language and an appreciation for the diverse cultures and backgrounds that contribute to the production of literature in English.
- Students will learn critical and analytical thinking skills, especially close reading skills.
- Students will learn how to comprehend and produce contextually informed arguments about literature.
- Students will learn to write and communicate clearly and effectively.

Requirements. The English major contains two tracks: literature and writing. Students should declare a track when they choose to major in English. For both tracks, majors must complete 36 credit hours in English.

Literature Track Requirements (Va)

Select at least 12 courses (36 cr.) above the 100 level, of which at least five must be on the 300-400 level, and no more than 3 courses (9 cr.) may be taken online. Of these 12, there are 9 required courses (27 cr.) for the literature track:

- Grammar and Usage (3 cr.): ENG-G 304
- Literary Interpretation (3 cr.): ENG-L 202
- Two British literature survey courses (6 cr.): ENG-L 211 and ENG-L 212
- Single author course (3 cr.): ENG-L 305, ENG-L 315, ENG-L 318, or ENG-L 369
- American literature (3 cr.): Choose one from ENG-L 350 through ENG-L 363
- Gender and Literature (3 cr.): Choose either ENG-L 207 or ENG-L 249
- World Literatures in English (3 cr.): Choose one from the following list - ENG-L 201, ENG-L 215, ENG-L 216, ENG-L 217, or ENG-L 382
- Senior Capstone Seminar (3 cr.): ENG-L 440

In addition to the listed requirements above, students must take at least 3 electives (9 cr.) within the major and complete the general education requirements for the College of Arts and Sciences.

Total (36 cr.)

Writing Track Requirements (Va)

Select at least 12 courses (36 cr.) above the 100 level, of which at least five must be on the 300-400 level, and no more than 3 courses (9 cr.) may be taken online. Of these 12, there are 9 required courses (27 cr.) for the writing track:

- Grammar and Usage: ENG-G 304 (3 cr.)
 Literary Interpretation: ENG-L 202 (3 cr.)
- Professional Writing: ENG-W 231 or ENG-W280 (3 cr.)
- Writing Fiction: ENG-W 301 (3 cr.)Writing Poetry: ENG-W 303 (3 cr.)
- Other Writing Forms: choose one from the following list: ENG-W 302, ENG-W 311 or ENG-W 350 (3 cr.)
- One literature class at the 300-400 level (3 cr.)
- Shakespeare: ENG-L 315 (3 cr.)
- · Senior capstone seminar: ENG-L 440 (3 cr.)

In addition to the listed requirements above, students must take at least 3 literature electives (9 cr.) within the major and complete the general education requirements for the College of Arts and Sciences.

Total (36 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.

We strongly encourage students in the Writing Track to take ENG-W 398, Internship in Writing.

Interdepartmental Major in African American and African Diaspora Studies and English

The Departments of Minority Studies and English offer a thematically integrated major in English and African American and African Diaspora Studies. This interdepartmental major is designed for students who wish to combine substantial African American and African Diaspora 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

- · Choose one from the following:
 - ENG-L 202 (3 cr.)
 - ENG-L 203 (3 cr.)
 - ENG-L 204 (3 cr.)
 - ENG-L 205 (3 cr.)

- Choose one from the following:
 - ENG-L 211 (3 cr.)
 - ENG-L 212 (3 cr.)
- Choose one from the following:
 - ENG-L 351 (3 cr.)
 - ENG-L 352 (3 cr.)
 - ENG-L 354 (3 cr.)
- Choose two additional 300-level courses in literature (6 cr.)

Total (15 cr.)

Writing Option

- ENG-W 231 (3 cr.)
- Choose one of the following:
 - ENG-W 311 (3 cr.)
 - ENG-W 350 (3 cr.)
- Choose one of the following:
 - ENG-W 301 (3 cr.)
 - ENG-W 303 (3 cr.)
- Choose two literature classes at the 200 level or above (6 cr.)

Total (15 cr.)

Creative Writing Option

- ENG-W 301 (3 cr.)
- ENG-W 303 (3 cr.)
- ENG-W 311 (3 cr.)
- Two literature classes at the 200-level or above (one must be at the 300-level or above)(6 cr.)

Total (15 cr.)

Women's and Gender Studies/English Option

- Required
 - ENG-L 207 Women and Literature (3 cr.) or WGS-W 207 Women and Literature
 - ENG-L 249 Representations of Gender and Sexuality (3 cr.)
 - WGS-W 201 Women in American Culture (3 cr.)
 - WGS-W 401 Topics in Women's and Gender Studies (3 cr.)
- And one of the following (3 cr.):
 - CMLT-C 340 Women in World Literature (3 cr.)
 - ENG-L 235 Gender, Sexuality, and Film (3 cr.)

Total (15 cr.)

Graduate Certificates in English

These 100 percent online, consortial graduate certificates are taught by IU Bloomington, IUPUI, IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

There are three graduate certificates in English that provide graduate-level instruction in English to students interested in obtaining advanced skills and knowledge in this discipline. Students may complete the requirements for a Graduate Certificate in English in one of three

competency areas: literature, language and literature, or composition studies.

Graduate Certificate in Literature (ONLINE)

Students must take one course in each of the numbered requirements.

- ENG-L 503—Teaching Literature in College
- 2. ENG-L 553—Studies in Literature
- Complete one of the following: ENG-D 600/ENG-G 655 History of the English Language

ENG-L 639 English Fiction To 1800 ENG-L 641 English Literature 1790-1900

ENG-L 660 Studies In British and American Literature

ENG-L 681 Genre Studies

 Certificates Electives (8 credits)
 Complete two additional courses in English Literature (ENG-L 500/600)

Electives may be repeated for credit so long as they are on a different topic.

Graduate Certificate in Language and Literature (ONLINE)

Students must take one course for each of the numbered requirements.

- ENG-W 509—Introduction to Writing and Literary Studies or ENG-W 500— Teaching Composition
- 2. ENG-L 503—Teaching Literature in College.
- Complete one of the following: ENG-D 600/ENG-G 655 History of the English Language

ENG-L 639 English Fiction To 1800

ENG-L 641 English Literature 1790-1900 ENG-L 660 Studies In British and American Literature

ENG-L 681 Genre Studies

4. Choose one of the following:

ENG-W 600 Topics in Rhetoric and Composition ENG-W 682 Special Topics in Rhetoric and Composition

ENG-W 508 Graduate Creative Writing for Teachers ENG-W 554 Practicum: Teaching Creative Writing

 ENG-L500/600—Literature Electives Complete one additional course in English Literature (ENG-L 500/600)

Graduate Certificate in Composition Studies (ONLINE)

Course requirements are as follows:

- 1) Complete one of: ENG-W 509 Introduction to Writing and Literacy Studies, or ENG- W500 Teaching Composition
- 2) Complete one of: ENG-G 660 Stylistics or ENG-L 646 Readings in Media, Literature, and Culture
- 3) Complete one of:

ENG-W 510 Computers in Composition ENG-W 553 Theory and Practice of Exposition

ENG-W 590 Teaching Composition: Theories & Applications

ENG-W 620 Advanced Argumentative Writing

- 4) Complete one of: ENG-W 501 Practicum on Teaching of Composition or ENG-W 600 Topics in Rhetoric and Composition
- 5) Complete one of:

ENG-R 546 Rhetoric and Public Culture ENG-W 600 Topics in Rhetoric and Composition ENG-W 682 Special Topics in Rhetoric and Composition

Major in English - Master of Arts (M.A.)

Indiana University's 36 credit hour, 100% online, collaborative MA in English meets the Higher Learning Commission's "Instructor Qualification" standard providing community college and dual-credit instructors teaching college-level introductory literature and composition courses with the opportunity for advanced study in the core areas of research and practice essential to successful teaching at the college-level.

The MA has a two-part, "stackable" structure that includes the completion of both a 20-credit graduate certificate in one of three areas: 1) Literature, 2) Composition, or 3) Language and Literature; as well as the completion of a further 16 credits of master's level coursework that extends students' breadth and depth of knowledge in the field. The stand-alone certificates meet the discipline-specific graduate coursework in literature and composition that the HLC requires, and individuals who already hold a master's degree in another discipline (M.S.Ed. e.g.) will pursue the certificate route. Students who need both the discipline-specific coursework and a master's degree will take the additional coursework required to earn that degree.

Specific areas of focus in the Certificate and MA curriculum include:

- · Linguistic structures and history of the English language and English literature;
- Reading strategies and literary practices, such as close reading, analysis of style, form and genre, and rhetorical practices.
- Approaches to composition and writing instruction, including the identification and evaluation of sources, use of evidence, generation of ideas, and the development and organization argument;
- · Fostering discussion and developing presentation skills in a seminar setting;
- Developing archival research skills and facility with electronic resources;
- Developments, trends and frontiers in the Digital Humanities.

Program Learning Outcomes

- 1) Command of the core principles of writing and literature pedagogy;
- 2) Deep understanding of the linguistic structure and history of the English language;
- 3) Command of a wide variety of reading strategies associated with genre and close reading, and possess the knowledge and tools necessary to teach these skills:

- 4) Possess analytical and presentation skills developed through the focused study of literature in a seminar format;
- 5) Facility with the tools and creativity in the conduct of archival research;
- An appreciation of current developments, trends and frontiers in the field of Digital Humanities;
- 7) The standards for training and expertise required to meet the HLC's standard for "Qualified" instructor

Program Admission Criteria

Admission to the collaborative M.A. in English is a twotiered process. Students first apply to one of the three online "stackable" graduate certificates (Literature, Literature and Language, and Composition). The certificate application is streamlined and requires a lessspecialized dossier.

Admission to the Certificate Programs (Literature, Composition, Language & Literature).

Minimum Academic Qualifications:

- B.A. in English, English Education, or secondary teaching experience in Language and Literature or composition classes;
- · 3.0 minimum undergraduate GPA

Required Certificate Application Materials:

- · Official transcripts from each undergraduate institution:
- · 250-word personal statement explaining background and reasons for entering the program;
- TOEFL score of 550 paper/79 internet required for international students whose first language is not English. This requirement can be waived for students holding a B.A. in English.

Admission to the M.A. Program

Certificate students who wish to pursue the online M.A. in English will have a track record of success in graduate coursework, completed papers and projects, as well as connections with their online instructors, which will provide them with the information and materials they need for the M.A. application.

Minimum Academic Qualifications:

Certificate students will become eligible to apply for admission to the M.A. after they have completed 3 certificate courses with a 3.5 or better GPA.

Required M.A. in English Application Materials:

- Successful completion of at least 3 courses in one of the stackable online graduate certificates (Composition Studies, Literature, or Literature and Language) with a 3.5 or higher GPA.
- · 250-word personal statement explaining background and reasons for entering the program;
- Writing Sample (expository)
- · Two letters of recommendation

Transfer Credit

Transfer credit, satisfactory academic progress, and dismissal from the certificate program will follow University Graduate School policy as published in University

Graduate School Bulletin and Graduate Handbook. Current policy is as follows:

Transfer Credit: With the approval of the steering committee and in accordance with pertinent IU policies, students may transfer in one four- credit course in partial satisfaction of certificate requirements. No course may be transferred from another institution unless the grade is a B or higher.

Satisfactory Academic Progress and Dismissal

A 3.0 GPA is required for good standing. Any semester's work averaging less than a B will result in the student being placed on academic probation. Accumulation of three individual course grades of C (2.0) or lower for graduate credit will result in dismissal of the student from the program. The department evaluates each student's progress toward the degree every year.

Dismissed students must sit out at least one semester. The curriculum committee will read petitions from students seeking re-entry on a rolling basis. The committee will look for evidence that the student has addressed the underlying issues and obstacles to academic success. Petitions must be submitted at least six weeks ahead of the academic term for which the student seeks enrollment.

Degree Structure and Requirements

Students pursuing the collaborative M.A. in English will complete a two-part degree program that includes a 20-credit stand-alone graduate certificate chosen from the following three options, Literature, Language & Literature, or Composition Studies (Part I), and 16 credits of additional master's degree coursework (Part II).

Required courses for the online M.A. in English will run using the ENG subject code and carry 4 credits.

Part I: Completion of one following three Graduate Certificate options (20 credits)

Option #1 Graduate Certificate in Literature

To earn the Graduate Certificate in Literature, students must complete five graduate courses for 20 credits.

Course requirements are as follows:

Introductory Course—Teaching Literature at the College Level

ENG-L 503 Teaching of Literature in College

History, Methods, and Practice of Literary Study

ENG-L 553 Studies in Literature

Course on the History and Development of the English Language or English Literature

Complete one of:

ENG-D 600/ENG-G655 History of the English Language

ENG L639 English Fiction To 1800

ENG L641 English Literature 1790-1900

ENG L660 Studies In British and American Literature

ENG L681 Genre Studies

Two Electives—any two ENG-L courses (in addition to L503 and L553)

ENG-L class at the 500/600 level

ENG-L class at the 500/600 level

Option #2 Graduate Certificate in Language and Literature

To earn the Graduate Certificate in Language and Literature, students must complete five graduate courses for 20 credits.

Course requirements are as follows:

Introductory Course—Graduate Composition Studies

Complete one of:

ENG W509 Introduction to Writing and Literacy Studies,

ENG W500 Teaching Composition

Introductory Course—Teaching Literature at the College Level

ENG L503 Teaching of Literature in College

Course on the History and Development of the English Language or English Literature

Complete one of:

ENG-D 600/ENG-G655 History of the English Language

ENG L639 English Fiction To 1800

ENG L641 English Literature 1790-1900

ENG L660 Studies In British and American Literature

ENG L681 Genre Studies

Writing Pedagogy for College Instructors

Complete one of:

ENG W600 Topics in Rhetoric and Composition

ENG W682 Special Topics in Rhetoric and Composition

ENG W508 Graduate Creative Writing for Teachers

ENG W554 Practicum: Teaching of Creative Writing

Certificate Elective

Complete an additional ENG-L 500/600

Option #3 Graduate Certificate in Composition Studies

To earn the Graduate Certificate in Composition Studies, students must complete five graduate courses for 20 credits.

Course requirements are as follows:

Introductory Course--Graduate Composition Studies

Complete one of: ENG W509 Introduction to Writing and Literacy Studies, or

ENG W500 Teaching Composition

Stylistics

Complete one of: ENG G660 Stylistics

ENG L646 Readings in Media, Literature, and Culture

Applied Writing Pedagogy

Complete one of: ENG W510 Computers in Composition

ENG W553 Theory and Practice of Exposition

ENG W590 Teaching Composition: Theories &

Applications

ENG W620 Advanced Argumentative Writing

Writing Pedagogy for College Instructors

Complete one of: ENG W501 Practicum on the Teaching of Composition in College

ENG W600 Topics in Rhetoric and Composition

Rhetoric Seminar or Capstone

Complete one of: ENG R546 Rhetoric and Public Culture

ENG W600 Topics in Rhetoric and Composition

ENG W682 Special Topics in Rhetoric and Composition

Part II: Additional Coursework for the M.A. in English (16 credits)

To earn the Master of Arts in English, students must complete an additional four graduate courses for 16 credits.

Courses in Core Skills and Methods of Advanced **Literary Study**

Complete two courses chosen from the following list (8 credits)

(cannot duplicate certificate enrollments)

ENG L506 Introduction to the Methods of Criticism and Research

ENG L646 Readings in Media, Literature, and Culture

ENG R546 Rhetoric and Public Culture

ENG W509 Introduction to Writing and Literacy Studies

ENG G500 Introduction to the English Language

Electives Courses (8 credits)

Complete any two ENG-X 500/600 level courses.

May include by permission only, ENG-W 609 Independent Writing

Geosciences

Phone: (219) 980-6740

Website: http://www.northwest.iu.edu/geosciences/

Geology

Geology is the scientific study of the earth, including its materials and resources, the physical and chemical processes that occur on its surface and in its interior, the development of landforms, and the methods for studying the planet.

The Bachelor of Science in Geology degree provides a rigorous general background in the field of geology and allied disciplines. The degree is designed for students who wish to prepare for graduate school, employment or state certification as a professional geologist. The degree also provides rigorous scientific training for students seeking a career in science education. This degree offers a more extensive requirement in biology, chemistry, mathematics, and physics compared with the Bachelor of Arts in Geology degree and is designed to optimize student opportunities. The degree requires participation in an accredited field camp in geology.

The Bachelor of Arts in Geology provides a general background in the field of geology and requires a diversified liberal arts education in place of some of the allied disciplines. The B.A. is an appropriate choice for students who wish to teach earth sciences at the secondary level and for those who wish to gain a general knowledge of the geosciences and their relationship to other sciences.

Learning Outcomes

- Student will develop critical and analytical thinking skills
- Students will be well-prepared in quantitative and qualitative analyses
- Students will possess a general knowledge of geologic theory and demonstrate its application in solving geological and environmental problems.
- Students will be able to communicate scientific concepts to scientists and non-scientists.

Major in Geology - B.S.

Requirements Majors complete 40-43 credit hours in geology and 36 credit hours in the allied disciplines

- Any **one** of the following 100-level courses AND laboratory:
 - GEOL-G101 Introduction to Earth Science (3 cr.)
 AND GEOL-G102 Intro to Earth Science Lab (1 cr.)
 - GEOL-G110 How the Earth Works (3 cr.) AND GEOL-G120 Intro to Earth Sciences Lab (1 cr.)
 - GEOL-G185 Global Environmental Change (3 cr.)
 AND GEOL-G102 Intro to Earth Science Lab (1 cr.)
- 2. All of the following:

GEOL-G209 History of the Earth (4 cr.)

GEOL-G221 Minerology(4 cr.)

GEOL-G222 Petrology (4 cr.)

GEOL-G317 Field and Laboratory Techniques (4 cr.)

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)

OR

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:

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

NOTE: Classes offered through IU Online must be approved by the IU Northwest Chair of Geosciences to count towards the geology major or minor.

3. Allied Courses

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

Physics (10 credits) PHYS P201, PHYS P202 **OR** PHYS P221, PHYS P222

Mathematics (10 credits) MATH M215, MATH M216 Geography GEOG-G338 (3 credits) Biology (3 credits)

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

Honors Track Major in Geology - B.S.

The Honors track recognizes the most accomplished students by an Honors designation on their transcripts. The total number of required credit hours for the Honors designation will not differ from the total number of credit hours for the BS degree in geology.

Students with a cumulative GPA of 3.2 or higher are potential candidates for the Honors track. They also need to do undergraduate Research within either GEOL-G407 Senior Geosciences Projects I and/or GEOL-G 408 Senior Geosciences Projects II, and present their research at the IU Northwest Undergraduate Research Conference, at the Geological Society of America Regional or National meeting, or comparable conferences.

Major in Geology - B.A.

Requirements

Majors complete at least 34-36 credit hours in geology, 11-12 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 laboratory:
 - GEOL-G101 Introduction to Earth Science (3 cr.)
 AND GEOL-G102 Intro. to Earth Science Lab (1 cr.)
 - GEOL-G110 How the Earth Works (3 cr.) and GEOL-G120 Intro. to Earth Science Lab (1 cr.)
 - GEOI-G185 Global Environmental Change (3 cr.)
 AND GEOL-G102 Intro. to Earth Science Lab (1 cr.)
- 2. All of the following:
 - GEOL-G209 History of the Earth (4 cr.)
 - GEOL-G221 Minerology (4 cr.)

- GEOL-G222 Petrology (4 cr.)
- GEOL-G317 Field and Laboratory Techniques (4 cr.)
- GEOL-G323 Structural Geology (4 cr.)
- GEOL-G334 Principles of Sedimentology and Stratigraphy (4 cr.)
- 3. Any two 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: GEOL-G406, GEOL-G413, GEOL-G415, GEOL-G435, GEOL-G451, GEOL-G476, GEOL-G490)

- 4. Allied Courses (11-12 cr.):
 - · One college level chemistry course
 - MATH-M125 and MATH-M126 (6 cr.) or MATH-M 127 (5 cr.)
 - Geography GEOG-G 338 (3 cr.)
- 5. 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.

Major in Sustainability (B.A. Online)

The IU Online BA in Sustainability Studies prepares students for such careers as sustainability policy consultant, environmental advocate, environmental engineer, natural sciences manager, environmental specialist, sustainability program coordinator, energy manager, ecotourism guide, energy auditor. This consortial program is taught by IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast. This consortial model allows students to take coursework from several campuses and learn from a wide range of faculty. It provides flexibility to meet degree requirements through multiple modalities. Students can complete this degree by completing courses 100 percent online or through a combination of inperson and online offerings. All students are responsible for fulfilling the general requirements of the bachelor's degree as established by the College of Arts and Sciences, which include a minimum of 36 hours at the

Learning Outcomes

1. Provides an interdisciplinary framework within which students study the foundations of sustainability and learn how to apply this knowledge to the development and implementation of sustainable values, innovations,

300-400 level. Completion of the BS in environmental

hours and a minimum of a 2.0 grade point average.

practices, and technologies in our

homes, communities, and businesses.

science requires a total of 120 credit

- 2. Emphasizes connections between environment, economy, and society, and builds a group of faculty and students prepared to address the complex socio-environmental
- issues confronting our local and global communities.
- 3. Prepares students to leverage sustainability, leadership and innovation to realize career opportunities presented by the green economy.
- 4. Fosters an ethical sensibility and capacity to deal with complex socio-environmental

issues.

Major requirements (42 credit hours) are broken down into the categories below. There are numerous courses within each category to choose from and majors should consult with their academic advisor for current course offerings. Find more information on this collaborative degree at: https://online.iu.edu/degrees/sustainability-studies-bachelor.html

To earn the BA in Sustainability Studies, students must complete 120 overall credit hours, statewide general education, any additional campus and school requirements, and the requirement of the 42-43 credit hour B.A. in Sustainability major, which are as follows:

- SUST-C 301 Fundamentals of Sustainability Studies (3 Cr)
- 2. Scientific Foundations of Sustainability

Two courses—one chosen from each of the following two lists:

- Introductory level sustainability science course (3 Cr) chosen from:
 - · BIOL-L 100 Humans and the Biological World
 - GEOG-G 107 Physical Systems of the Environment
 - GEOG-G 108 Physical Systems of the Environment Lab
 - GEOG-G 110 Human Geography in a Changing World
 - GEOL-G 101 Introduction to Earth Science
 - GEOL-G 185 Global Environmental Change
- Two upper-level sustainability science course (6-7 Cr) chosen from:
 - GEOL-G 400 Energy: Sources & Needs
 - BIOL-L 333 Environmental Science
 - BIOL-L 325 Ecological Principles
 - GEOL-G 476 Climate Change Science
 - SUST-C 330 Scientific Foundations of Sustainability
- 3. Two courses in the Social & Behavioral Foundations of Sustainability (6 Cr) chosen from:
 - AAAD-A#301 Community Planning and Development
 - GEOG-G 315 Environmental Conservation
 - POLS-Y 308 Urban Politics
 - POLS-Y 346 Politics of the Developing World
 - SOC-S 308 Global Society
 - SUST-C 340 Social and Behavioral Approaches to Sustainability
- 4. Arts and Humanities and Sustainability (3 Cr)
 - ENG-L 301 English Literature Survey I
 - ENG-L 390 Childrens Literature
 - SUST-C 350 Sustainability in the Arts and Humanities

5.1 Methods & Techniques for Sustainability Studies (6 Cr)

- SOC-S 261 Research Methods in Sociology
- SOC-S 262 Statistics for Sociology
- ECON-E 270 Introduction to Statistical Theory and Economics and Business
- GEOG-G 338 Geographic Information Systems
- GEOG-G 438 Advanced Geographic Information Systems
- SUST-C 320 Methods and Applications in Sustainability

5.2 Written Communication (3 Cr)

- ENG-W 231 Professional Writing Skills
- ENG-W 234 Technical Report Writing
- · ENG-W 230 Writing in the Sciences
- ENG-W 250 Writing in Context: VT Writing Nature
- ENGL-W 270 Argumentative Writing

6. Business & Economics of Sustainability (3 Cr)

- GEOG-G 314 Urban Geography
- · GEOG-G 320 Population Geography
- GEOG-G 369 Geography of Food
- GEOG-G 478 Global Change, Food, and Farming Systems
- PHIL-P 306 Business Ethics
- SUST-C 360 Business and Economics of Sustainability

7. Sustainability Electives (6 cr)

Two additional courses selected from the list of eligible courses for requirements 2-6. Electives cannot be used to satisfy other BA Sustainability requirements.

- 9. Sustainability Capstone: (3 Cr)
 - SUST-C 490 Sustainability Practicum

Interdepartmental Major in Environmental Science - B.S.

The Environmental Science major is an interdepartmental program that leads to a Bachelor of Science degree in Biology, Chemistry, or Geology, with a major in Environmental Science. It provides a 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 Environmental Science major 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.

All students are responsible for fulfilling the general requirements of the bachelor's degree as established by the College of Arts and Sciences, which include a minimum of 36 hours at the 300-400 level. Completion of the BS in environmental science requires a total of 120 credit hours and a minimum of a 2.0 grade point average.

Students fulfill core requirements from the disciplines of geology, biology and chemistry and choose two disciplines for an interdepartmental concentration area. Please consult the individual departments for more information.

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 of the two concentration areas. Students are required to complete additional courses 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
 - Any one of the following 100-level courses AND laboratory:
 - GEOL-G 101 Introduction to Earth Sciences (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
 - GEOI-G110 How the Earth Works (3 cr.) AND GEOL-G102 Intro. to Earth Science Lab (1 cr.)
 - GEOL-G 185 Global Environmental Change (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
 - GEOL-G209 History of the Earth Lecture/ Lab (4 cr.)
 - CHEM-C105 CHEM-C125 Principles of Chemistry I/Experimental Chemistry I (5 cr.)
 - CHEM-C106 CHEM-C126 Principles of Chemistry II/Experimental Chemistry II (5 cr.)
 - BIOL-L101 Introduction to Biological Sciences I – Lecture/Lab (4 cr.)
 - BIOL-L102 Intro to Biological Sciences II Lecture/Lab (4 cr.)
- Public and Environmental Affairs allied environment requirement. Coursework selections must be approved by the student's Faculty Advisor.
 - Select one of the following
 - SPEA E272 Intro to Environmental Science (3 cr.)
 - SPEA E400 (Topics in Environmental Studies) (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. Geography GEOG-G315, and GEOG-G338 may be used in fullfillment of this requirement. Coursework selections must be approved by the student's Faculty Advisor. Coursework completed in the students' chosen disciplines from 2. above (Geology, Chemistry, and Biology requirements) count toward the total credit hours.
- Allied Sciences (8-15 credit hours) Choose two of the following:
 - MATH-M215 Calculus I (5 cr.)
 - K300 Statistics (3 cr.)
 - PHYS-P201 and PHYS-P202 Algebrabased Physics I (5 cr.)

 PHYS-P221 and PHYS-P222 – Calculusbased Physics II (5 cr.)

 Senior Seminar (capstone) (integration of Biology/ Chemistry/Geology into environmental topics of current importance) (1 cr.) – GEOL-G490/BIOL-L403/CHEM-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.
 - MATH-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.

Earth Science Minor (15 cr.)

- 1. Any one of the following 100-level courses AND laboratory:
 - GEOL-G 101 Introduction to Earth Sciences (3 cr.)
 AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
 - GEOI-G110 How the Earth Works (3 cr.) AND GEOL-G102 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.)
- 2. GEOL-G 209 History of the Earth (4 cr.)
- 3. Additional coursework must consist of at least two 200-400 level geology (GEOL) and/or geography (GEOG) courses. Course selections must be coordinated with and approved by the IU Northwest Chair. Field trip courses (e.g. GEOL G220/ G420) cannot be used to satisfy the upper-level course requirements.

Geology Minor (15 cr.)

- 1. Any **one** of the following 100-level courses AND laboratory:
 - GEOL-G 101 Introduction to Earth Sciences (3 cr.) AND GEOL-G 102 Intro. to Earth Science Lab (1 cr.)
 - GEOI-G110 How the Earth Works (3 cr.) AND GEOL-G102 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.)
 - 2. GEOL-G 209 History of the Earth (4 cr.)

3. Additional coursework must consist of at least two 200-400 level geology (GEOL) courses. Course selections must be coordinated with and approved by the IU Northwest Chair. Field trip courses (e.g. GEOL G220/G420) cannot be used to satisfy the upper-level course requirements.

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
 - Geospatial Technologies, Geographic Information Sytems (GIS), Cartography, Aerial Photography and Remote Sensing
 - · Urban and/or regional planning
- · Provide the background for graduate study

History, Philosophy, Political Science, and Religious Studies

Phone: (219) 980-6655

Website: https://northwest.iu.edu/hist-phil-rel-pols/

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.

History 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, Philosophy, Political Science, and Religious Studies.

The Paul J. Urcan Memorial Prize Award Each year, a committee of departmental faculty 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.

Major in History

Learning Outcomes

Content: Demonstrate knowledge of at least three geographic regions of the world in both modern and pre-modern time periods. This will include historical geography, historical actors, events of significance, and social movements with emphasis on exploring historical themes that span multiple places and periods.

Interpretation of History: Formulate historical interpretations that effectively make use of such interpretive tools as historical context, historiography, multiple perspectives, as well as continuity and change over time

Requirements

- HIST-H 105 (3 cr.)
- HIST-H 106 (3 cr.)
- HIST-H 113 (3 cr.)
- HIST-H 114 (3 cr.)
- HIST-H 215 Proseminar in History, taken before the capstone course
- History courses numbered 200-499 (18 cr.), including
 - 2 courses in United States history [HIST A] (6 cr.)
 - 2 courses in European history (from the Middle Ages to the present) [HIST B] (6 cr.)
 - 2 courses in other areas or topics in history (e.g., ancient, non-European, non-U.S.) [HIST C,D,F,G, or T] (6 cr.)
- HIST-J 495 Proseminar in History to fulfill capstone requirement
- 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.

Major in History-B.A. (ONLINE) Learning Outcomes

- Demonstrate a breadth of knowledge of both Western and Global regions in both modern and pre-modern time periods. This will include historical geography, historical actors, events of significance, and social movements with emphasis on exploring historical themes that span multiple places and periods.
- Formulate historical interpretations that effectively make use of such interpretive tools as historical context, historiography, multiple perspectives, as well as continuity and change over time.
- Demonstrate an understanding of diverse human cultures by describing cultural variation within and between nations. Perceptions of diversity may be expressed through a variety of factors such as race, gender, age, sexuality, language, religion, ethnicity, class, region, or beliefs and values about politics, nationality, economy, and social organization.

- Produce work that exhibits critical thinking through the creation of theses, the synthesis and analysis of primary and secondary evidence, coherent paragraphs, smooth transitions, and the logical sequence of ideas.
- Search and retrieve relevant primary and secondary historical sources from a variety of repositories such as libraries, archives, museums, digital archives, etc, and use historical methods to analyze the data produced.
- Integrate and synthesize primary and secondary sources to craft historical interpretations, narratives, and arguments.

Degree Requirements

To earn the IU Online collaborative B.A. in History, students must complete all the standard campus- and school-specific degree requirements, including general education, and the 36 credit History major comprised of the following requirements:

- 1) Complete a two-part History Foundations course sequence (6cr) to be chosen from:
- a) HIST-H 105 American History I and HIST-H 106 American History II;
- b) HIST-H 108 Perspectives on the World to 1800 and HIST-H 109 Perspectives on the World 1800 to Present;
- c) HIST-H 113 History of Western Civilization I and HIST-H 114 History of Western Civilization II.
- 2) Complete two additional introductory level History courses selected from the list below (6 cr). Courses used to satisfy the History Foundations requirement cannot be applied towards satisfaction of this requirement.

HIST-A 100 Issues in United States History

HIST-E 100 Introduction to African History

HIST-F 100 (Issues in Latin America)

HIST-G 100 (Issues in Asian History)

HIST-H 101 The World in the Twentieth Century

HIST-H 105 (US to 1865)

HIST-H 106 (Us from 1865)

HIST-H 108 Perspectives on the World to 1800

HIST-H 109 Perspectives on the World since 1800

HIST-H 113 History of Western Civilization I

HIST-H 114 History of Western Civilization II

3) Complete HIST-J 216 Sophomore Seminar in History (3 Cr).

4) Complete six History courses at the 300/400 level (18 cr). These six courses must include classes in 3 different regions as denoted by the course prefix. Upper-level History courses the following subject code-prefix combinations to identify regions:

HIST-A = U.S.

HIST-B = Western Europe

HIST-D = Russia/Eastern Europe

HIST-E = Africa

HIST-F = Latin America

HIST-G = East Asia

5) Complete HIST-J 496 Proseminar in History

Minor in History Requirements

- · Take one of the following:
 - HIST H105 American History I (3 cr.)
 - HIST H106 American History II (3 cr.)

- HIST H113 World Civilization I (3 cr.)
- HIST H114 World Civilization II (3 cr.)
- 4 courses at the 200-400 level from 2 different fields (American, European, non-Western, including at least 2 300-400 level courses) (12 cr.)

Graduate Certificate in History (ONLINE)

The IU Online Graduate Certificate in History provides graduate-level instruction in the field of history.

Gain a depth of knowledge in a variety of historical subjects, practice historical interpretation, think critically, employ research and analysis methods, and communicate concepts and ideas with precision and clarity.

Develop skills including:

- Effective oral and written historical communication skills.
- The ability to perform research.
- The ability to construct original historical arguments.
- The ability to effectively teach dual-credit history courses.

To earn the GC History, students must complete 18 credits of graduate History courses including the T590 Research Seminar in History.

I. Graduate U.S. History courses (15 cr)

Students complete five courses selected from the following list of six:

HIST-T 510 Historical Methodology (3 cr)

HIST-T 520 Teaching College History (3 cr)

HIST-T 530 Early America, 1400-1800 (3 cr)

HIST-T 540 The Long 19th Century, 1800-1917 (3 cr)

HIST-T 550 Modern United States, 1917-Present (3 cr)

HIST-T 560 US and the World – Comparative History (3 cr)

II. History GC Capstone (3 cr)

Students complete:

HIST-T 590 Research Seminar in History (3 cr)

M.A. in History (ONLINE)

By studying the past, we are better able to understand and communicate the importance of issues in our contemporary world. The IU Online Master of Arts in History explores geographic regions of the world in both modern and pre-modern time periods to identify historical actors, events of significance, and social movements.

Gain graduate-level historical knowledge, critical thinking skills, and techniques for clear and persuasive writing. Learn to recognize historiographic trends and their meanings, perform research, and construct original historical arguments. Your studies will culminate in at least one semester-long research project of original scholarship.

Specific areas of focus include:

- Early America (1400–1800)
- The long 19th century in the US (1800–1917)
- Modern United States (1917–present)
- · The US and the world
- European history
- Latin American history

- Asian history
- African history

Program Learning Outcomes

- 1. Effective oral and written historical communication skills
- Apply historical methods
- Identify and describe broader historical context beyond one geographical region
- Explain historiographic trends
- Connect historical events/issues to contemporary situations
- 2. Ability to perform research
- Locate and identify primary source material (written, visual, material culture,

artistic, oral, photographic, video, digital)

- Locate and identify secondary source material
- Employ appropriate academic style and citations
- 3. Ability to construct original historical arguments
- Assess validity of historical sources
- Analyze historical sources to develop and support an argument
- Produce article-length original research papers and projects
- 4. Develop competencies in digital and public history
- Evaluate, develop, and use digital tools for historical research and presentation
- Employ the methods and theories of digital and public history

Degree Requirements

To earn the IU collaborative MA in History, students must complete 10 graduate History courses for a total of 30 credits and satisfy the following core and distribution requirements:

1. Historical Methodology (3 Cr)

Complete: HIST-T 510 Historical Methodology

2. Digital and Public History (3 Cr)

Complete: HIST-T 570 Digital and Public History

3. One four-course major field (12 Cr)

The collaborative MA in History offers two major options—U.S. History or World History

Option one: U.S. History (complete 4 of 5)

HIST-T 520 Teaching College History

HIST-T 530 Early America, 1400-1800

HIST-T 540 The Long 19thCentury, 1800-1917

HIST-T 550 Modern United States, 1917-Present

HIST-T 560 US and the World -Comparative History

Option Two: World History (complete 4 of 5)

HIST-T531 European History

HIST-T541 Latin American History

HIST-T551 Asian History

HIST-T 561 African History (in development)

HIST-T571 World History

Students in the World History major may repeat any one of the major courses once for credit provided the repeated course has a different topic. Students cannot count a third enrolment in a particular course in the MA History (even if all three versions have different topics). This ensures that students cover at least two regions when completing the World History major.

4. Minor Field (6 cr)

Two courses chosen from the list of courses listed for the other major.

5. Historical Research (3 Cr)

Complete: HIST-T 590 Research Seminar in History

6. MA History Capstone (3 Cr)

Students complete one of the following three options:

- HIST-T 590 Research Seminar in History—Students produce an additional semester long project research on a topic of the student's own choosing in consultation with the instructor of record that will culminate in an article-length work (8,000 to 10,000 words excluding notes and bibliography) of original scholarship based on primary and secondary sources.
- HIST-T 591 Research Seminar in Digital and Public History P: T570 Digital and Public History. Students produce a digital or public history project based in original scholarship.
- 3. HIST-T 592 Thesis Students produce a thesis length research project that builds on a previous paper and is based on original scholarship. The outcome will be at least 40 pages in length.

M.A.T. in History (Online)

The IU Online Master of Arts for Teachers in History combines coursework in education and history to prepare you to be a dual-credit instructor at the high school and community college levels. The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

As a student in the history component of the program, you focus on the historiographic trends and historical context necessary to properly analyze current events. You gain a depth of knowledge in a variety of historical subjects while learning the most effective methods to teach those subjects to an undergraduate audience. You learn to perform historical research and construct original arguments while assessing the validity of the historical sources you use.

Program Learning Outcomes

Upon completion of the History component of the Master of Arts for Teachers in History, graduates will be able to -

 Model effective oral and written historical communication skills by applying historical methods,

- identifying and describing historical contexts, explaining historiographic trends, connecting historical events/issues in contemporary situations, and employing appropriate academic style and citation.
- Use a variety of digital tools for historical research to perform research, locate and identify primary and secondary source material (written, visual, material culture, artistic, oral, photographic, video, digital).
- Assess the validity and analyze the significance of historical sources to develop and support historical arguments.
- Select sources, prepares lessons, and align distinct teaching methods to learning outcomes in order to provide effective History instruction at the College level.

Upon completion of the Education component of the Master of Arts for Teachers in History, graduates will be able to—

- Engage in the development of rigorous curriculum planning and design:
- Promote college-level studies skills and habits of mind:
- 3. Use assessment data to inform college-level instructional practices;
- Prepare dual-credit students for success in collegelevel assessments;
- 5. Conduct research to improve dual-credit instruction.

MAT Requirements

To earn the Master of Arts for Teachers in History, students must complete the graduate history and graduate education degree components for a total of 30 credits.

I. MAT History --History Component (identical to the GC History)

a. U.S. History (15 cr)

Complete five courses selected from the following list: HIST-T 510 Historical Methodology (3 cr)
HIST-T 520 Teaching College History (3 cr)
HIST-T 530 Early America, 1400-1800 (3 cr)
HIST-T 540 The Long 19th Century, 1800-1917 (3 cr)
HIST-T 550 Modern United States, 1917-Present (3 cr)
HIST-T 560 US and the World – Comparative History (3 cr)

b. History Capstone (3 cr)

HIST-T 590 Research Seminar in History (3 cr)

II. MAT History—Education Component (12 cr)

Complete the following four School of Education graduate classes:

- 1) EDUC-H 520 Education and Social Issues
- 2) EDUC-J 500 Instruction in the Context of Curriculum
- 3) EDUC-P 507 Assessment in Schools
- 4) EDUC-Y 520 Strategies for Educational Inquiry

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.

Learning Outcomes

- Demonstrate the ability to reason ethically and apply ethical principles when making decisions.
- Demonstrate an awareness of the responsibilities and roles of being a citizen and strategies for being involved in a democratic society.

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. Three courses from the sequence in the history of philosophy: PHIL-P 201, PHIL-P 211, PHIL-P 301, PHIL-P 304. 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.

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 the Political Science Program

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.

Learning Outcomes

- Demonstrate the ability to reason ethically and apply ethical principles when making decisions.
- Demonstrate an understanding of structures and processes of American government commensurate with citizenship duties and an effective civil society.
- Demonstrate a high degree of familiarity with a broad range of political systems.
- Demonstrate effective written and communication skills

Major in Political Science - B.A. Requirements

In addition to meeting the College of Arts and Sciences' requirements for all B.A. degrees, political science majors must take 36 credit hours in political science, choosing their classes from the following groups.

Core courses (9 cr.).

- POLS-Y 103 Introduction to American Government
- POLS-Y 395 Quantitative Political Analysis
- POLS-Y 490 Senior Seminar in Political Science (independent study)

American institutions and processes (9 cr.)

- POLS-Y 200 Contemporary Political Topics
- POLS-Y 205 Analyzing Politics
- POLS-Y 304 Constitutional Law
- POLS-Y 318 The American Presidency
- POLS-Y 319 U.S Congress
- POLS-Y 401 Topics Course

International relations and comparative politics (9 cr.)

- POLS-Y 335 Comparative Politics Europe
- POLS-Y 360 U.S Foreign Policy
- POLS-Y 362 International Politics of Selected Regions -Latin America
- POLS-Y 366 Current Foreign Policy Problems
- POLS-Y 372 International Relations
- POLS-Y 373 Politics of Terrorism

Political theory and philosophy (9 cr.)

- POLS-Y 381 Classical Political Philosophy
- POLS-Y 382 Modern Political Philosophy
- POLS-Y 384 Development of American Political thought II

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.

Major in Political Science Pre-Law Track - B.A.

In addition to meeting the College of Arts and Sciences' requirements for all B.A. degrees, political science pre-law track majors must take 33 credit hours, as outlined below.

Core courses (12 cr.)

• POLS Y103 Introduction to American Government

- POLS Y304 Constitutional Law
- POLS Y395 Quantitative Political Analysis
- POLS Y490Senior Seminar (as an Independent Study)

American Institutions and processes (6 cr.)

- POLS Y318 The American Presidency
- POLS Y319 U.S. Congress

International relations and comparative politics (6 cr.)

- POLS Y360 U.S. Foreign Policy
- POLS Y372 International Relations

Political theory and philosophy (9 cr.)

- POLS Y381 Classical Political Philosophy
- POLS Y382 Modern Political Philosophy
- POLS Y384 Development of American Political Thought II

Addltional Requirements - Group VB:

Phil P150 Elementary Logic (counts toward Group III C)

Recommended: In addition to meeting department and general requirements, the political science department strongly suggests that political science pre-law track majors take supporting courses In economics and history, especially American history.

Minor in Political Science Requirements

- POLS-Y 103 Introduction to American Government
- POLS-Y 318 U.S. Presidency
- POLS-Y 319 U.S. Congress
- POLS-Y 372 International Relations
- POLS-Y 360 U.S. Foreign Policy
- One Course in Political Theory (Y381, Y382, or Y384)

Total: 18 credits

Minor in Foundations of Law

Requirements

- POLS-Y 103 Introduction to American Government
- POLS-Y 304 Constitutional Law
- POLS-Y 381 Classical Philosophy
- POLS-Y 382 Modern Philosophy
- POLS-Y 384 American Political Thought
- PHIL-P 150 Elementary Logic

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

Graduate Certificate in Political Science

The IU Graduate Certificate in Political Science provides graduate coursework in political science to prepare you to be a dual-credit instructor at the high school and community college levels.

As a student in the GC Political Science, you study major political figures, philosophies, and movements throughout history in order to understand the political events of today. You will complete coursework in subfields of political science (and the central questions they address) so that you can teach students to critically evaluate political institutions, analysis, and schools of thought. You

also gain a crucial understanding of American political institutions and behaviors in comparison to political climates around the world.

Specific areas of focus include:

- · Empirical theory and the scope of political science
- · Political science research methods
- · Political theory and political thought
- · Political behavior, opinion, and identities
- · Government and political institutions
- American politics in a comparative perspective
 Graduate Certificate in Political Science Requirements (18 cr)

Students complete one enrollment in each of the following six classes:

- 1) POLS-P 570 Introduction to the Study of Politics
- 2) POLS-Y 580 Research Methods in Political Science **OR** POLS-Y 524 Research Methods for Public Affairs **OR** 2) STAT-S 512 Statistical Learning and Data Analysis **OR**
- STAT-S 520 Introduction to Statistics
- 3) POLS-Y 675 Political Philosophy
- 4) POLS-Y 567 Public Opinion: Approaches and Issues **OR** POLS-Y 575 Data Analysis for Political Science
- 5) POLS-Y 661 American Politics
- 6) POLS-Y 657 Comparative Politics OR POLS-Y 757 Comparative Politics

M.A.T. in Political Science (ONLINE)

The IU Online Master of Arts for Teachers in Political Science combines coursework in education and political science to prepare you to be a dual-credit instructor at the high school and community college levels.

The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

As a student in the political science component of the program, you study major political figures, philosophies, and movements throughout history in order to understand the political events of today. You complete coursework in subfields of political science (and the central questions they address) so that you can teach students to critically evaluate political institutions, analysis, and schools of thought. You also gain a crucial understanding of American political institutions and behaviors in comparison to political climates around the world.

Specific areas of focus include:

- · Empirical theory and the scope of political science
- · Political science research methods
- · Political theory and political thought
- · Political behavior, opinion, and identities
- · Government and political institutions
- · American politics in a comparative perspective

Program Learning outcomes

Graduate Political Science Component Upon completion of the Master of Arts for Teachers in Political Science, students will be able to:

1. Explain the role of political science within the social sciences, the various methods used to build the body of knowledge in political science, and the practical application of this knowledge to our political environment.

- Understand, evaluate and conduct empirical social science research through literature review and the application of tools and strategies for collecting and shaping public opinion, including polling, focus groups, and advertising.
- 3. Interpret, analyze, and trace the influence of major theories and themes in American political thought.
- 4. Isolate and analyze factors that shape the political attitudes, beliefs and preferences on individuals and groups and map their impacts on political behavior and decision-making.
- 5. Students will be able to evaluate and analyze the institutions, processes, and behaviors associated with American politics.
- 6. Situate and analyze American political institutions, processes, and behaviors in a comparative perspective that accounts for regional and international differences. Graduate Education Component Upon Completion of the Education Component of the Master of Arts for Teachers in Political Science, graduates will be able to:
- 1. Teach introductory college-level classes that prepare students for future academic success;
- 2. Engage in the development of rigorous curriculum planning and design;
- 3. Promote college-level studies skills and habits of mind;
- 4. Use assessment data to inform college-level instructional practices;
- 5. Prepare dual-credit students for success in college-level assessments;
- 6. Conduct research to improve dual-credit instruction.

MAT Requirements

To earn the MAT in Political Science, you must complete 30 credit hours.

Requirements are broken down as follows:

- Core Political Science courses (18 cr)
- Education Component (12 cr)

I. Political Science Component (18 cr)

Students complete one enrollment in each of the following six classes:

- 1) POLS-P 570 Introduction to the Study of Politics 1
- 2) POLS-Y 580 Research Methods in Political Science **OR** POLS-Y 524 Research Methods for Public Affairs **OR** 2) STAT-S 512 Statistical Learning and Data Analysis **OR** STAT-S 520 Introduction to Statistics
- 4) POLS-Y 675 Political Philosophy
- 5) POLS-Y 567 Public Opinion: Approaches and Issues **OR** POLS-Y 575 Data Analysis for Political Science
- 6) POLS-Y 661 American Politics
- 7) POLS-Y 657 Comparative Politics **OR** POLS-Y 757 Comparative Politics

II. MAT Political Science—Education Component (12 cr)

To fulfill the Education Component of the MAT in Biology, students complete one enrollment in each of the following four classes:

- 1) EDUC-H 520 Social Issues in Education
- 2) EDUC-J 500 Instruction in the Context of Curriculum
- 3) EDUC-P 507 Assessment in Schools
- 4) EDUC-Y 520 Strategies for Educational Inquiry

M.A. in Political Science (ONLINE)

The IU Online Master of Arts in Political Science offers instruction in the approaches and methods political scientists use to analyze and explain political institutions and behavior.

Read, interpret, and evaluate literature in the political science discipline. Study the role of political science within the social sciences, the various methods used to build a body of knowledge, and the application of this knowledge to the political environment around you. Trace the influence of major theories and themes in political thought, and conduct empirical social science research.

Tailor your degree to your professional interests by choosing one of two tracks:

- World politics
- American politics

Your IU Online MA in Political Science may prepare you for careers in such fields as:

- Non-governmental organizations (NGOs)
- Education
- Lobbying
- · Policy analysis
- National security
- Public service, government, and politics

This 100 percent online program is taught by IU East, IU Bloomington, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast. This consortial model allows you to take coursework from several campuses and learn from a wide range of faculty.

Of Special Interest for Teachers/Instructors Needing to Meet HLC Dual-Credit Standards

The stackable structure of the MA in Political Science is ideal for those who want to teach dual-credit courses and who need to meet Higher Learning Commission dual-credit qualification standards. These standards require teachers wanting to teach dual-credit courses in political science to hold either a master's degree in political science or a master's degree in another discipline (such as education), plus at least 18 credit hours of discipline-specific graduate coursework.

- If you need both discipline-specific coursework and a master's degree, the MA in Political Science meets HLC standards.
- If you already hold a master's degree in a discipline other than political science, you can meet HLC standards by completing the .

Program Learning Outcomes

- Explain the role of political science within the social sciences, the various methods used to build the body of knowledge in political science, and the practical application of this knowledge to our political environment.
- Understand, evaluate and conduct empirical social science research through literature review and the application of tools and strategies for collecting and shaping public opinion, including polling, focus groups, and advertising.

- Interpret, analyze, and trace the influence of major theories and themes in American political thought.
- Isolate and analyze factors that shape the political attitudes, beliefs and preferences on individuals and groups and map their impacts on political behavior and decision-making.
- 5. Students will be able to evaluate and analyze the institutions, processes, and behaviors associated with American politics.
- Situate and analyze American political institutions, processes, and behaviors in a comparative perspective that accounts for regional and international differences.

Degree Requirements

To earn the IU Online Collaborative MA in Political Science, students must complete six core courses including the capstone and one of two available tracks—either American Politics or World Politics—for a total of ten courses/30 credit hours.

Core Courses (six courses/18 credits)

- POLS-P 570#Introduction to the Study of Politics#(3 credits)
- 2. POLS-Y#575#Political#Data Analysis#1 (3 credits)
- 3. One of the following methods courses: (3 credits)
- POLS-Y 580#Research Methods in Political Science
- POLS-Y 524 Research Methods for Public Affairs
- STAT-S 512 Statistical Learning and Data Analysis
- STAT-S 520 Introduction to Statistics
- 4. POLS-Y 529#National Political Institutions#(3 credits)
- 5. One of the following comparative politics courses (3 credits)
 - POLS-Y 657#Comparative Politic

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 - POLS-Y 757 Comparative Politics
 - 6. Capstone (3 credits)
 - POLS-Y 600 Capstone in Political Science

Track Courses (four courses/12 credits)

Complete one of the following tracks:

American Politics

- 1. POLS-Y 675#Political Philosophy#(3 credits)
- POLS-Y 567#Public Opinion: Approaches and Issues#(3 credits)
- 3. POLS-Y 661#American Politics (3 credits)
- One additional course selected from the World Politics track **OR** a second enrollment in POLS-Y 661 with a different topic (3 credits).

World Politics

- 1. POLS-Y 669#International Relations (3 credits)
- 2. Comparative Politics (3 credits)
 - POLS-Y 657#Comparative Politics#DR POLS-Y 757 Comparative Politics
- POLS-Y 530#Globalization and International Political Economy (3 credits)
- POLS-Y#508#Topics in World Politics (topics vary) (3 credits)

For more information see <u>Political Science</u>, <u>MA: Online Degrees: Online Degree Programs: Indiana University (iu.edu)</u>.

Minor in Medical Humanities

The cross-disciplinary minor in Medical Humanities provides an introduction to the social, historical, cultural, and ethical contexts of medicine to understand its shifting role and changing definitions. This minor introduces students to the cultural history of the medical profession, the variant perspectives of patients, the role that systems and states have played in the development and practice of medicine, and the representations of medicine in art. It is ideal for medical professionals seeking to expand their understanding of the values of their field and improve their interactions with patients.

Core courses (6 credit hours)

MHHS M301 Perspectives on Health, Disease and HealingMHHS M495 Independent Project/ Seminar in MHHS (Capstone)

Elective courses (9 credit hours)

HIST H303 History of Disability
PHIL P393 Biomedical Ethics
ENG L201 Special Studies in Literature
SOC S431 Disability, Stigma, and Society
FINA A346 Art and the Culture Wars
BIOL L300 Social Implications of Biology
SPEA H342 Community Health Education
SPEA H416 Environmental Health Policy
SPEA H455 Topics in Public Health

15 cr. hr.

Mathematics and Actuarial Science

Phone: (219)980-6590

Website: http://www.northwest.iu.edu/math/

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

Learning Outcomes

Goal 1. Use mathematical models such as formulas, graphs, and tables to draw inferences.

Goal 2. Represent mathematical information symbolically, visually, numerically, and verbally.

Goal 3. Use arithmetic, algebraic, geometric, logical, and / or statistical methods to model and solve real world problems.

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 mathematics placement test to determine their skill level and mathematics 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 tree diagram which is available at http://www.northwest.iu.edu/math/classes/flow-chart.htm.

- MATH-A 100 and MATH-M 117. For students who lack the background in algebra for freshman-level college mathematics.
- MATH-M 100. Terminal course for students in the humanities and the Allied Health sciences. Fulfills the Group I mathematics requirement in the College of Arts and Sciences.
- MATH-M 118, MATH-M 119. May be taken in either order. Primarily for majors in business and the social sciences.
- MATH-M 125-MATH-M 126, MATH-M 127.
 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-M 215 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 introductory courses include

- MATH-A 100
- MATH-M 117

Courses for nonmajors include

- MATH-M 015
- MATH-M 100
- MATH-M 110
- MATH-M 111
- MATH-M 118
- MATH-M 119
- MATH-M 125
- MATH-M 126
- MATH-M 127
- MATH-K 200
- MATH-K 300
- MATH-T 101
- MATH-T 102
- MATH-T 103
- MATH-T 490

Major in Mathematics - B.A.

Requirements (30-32 cr.)

- Required core courses (29 cr.)
 - MATH-M 215 (5 cr.)
 - MATH-M 216 (5 cr.)
 - MATH-M 301 (3 cr.)
 - MATH-M 311 (4 cr.) should be taken as soon as 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.)

- (1) 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.)
 - MATH-M 391 (3 cr.)
- (2) Applications (12 cr.)
 - at least four additional 300 or 400 level mathematics courses not used for 1, 3, or 4.
- (3) 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.)
- (4) 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 Department of Mathematics and Actuarial Science 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.)
 - 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 201 (3 cr.)
 - ECON-E 202 (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.)
 - 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.

B.S. in Actuarial Science (ONLINE)

The IU Online BS in Actuarial Science offers instruction in mathematics, actuarial mathematics, probability and statistics, finance, statistical modeling, data analysis, and software application.

Study the key concepts of insurance, risk management, and interest theory. Solve conceptual and computational problems. Learn to price-risk to determine premiums, analyze data, determine suitable models and parameter values, and provide measures of confidence. Calculate present and accumulated values for various streams of cash flow.

The learning outcomes for this BS align with actuarial science core competencies as outlined by professional organizations such as the Society of Actuaries and the American Academy of Actuaries. This program prepares you for success in the first two professional exams in actuarial science and provides the foundation for subsequent exams.

Your IU Online BS in Actuarial Science prepares you for such careers as:

- Actuary
- Insurance analyst
- · Market research analyst
- Management analyst
- Financial manager/analyst
- Actuarial consultant

Learning Outcomes

Knowledge in Basic Mathematics: Students will utilize tools from multivariate calculus to answer conceptual

and computational problems related to probability.

and computational problems related to probability and statistics.

- Knowledge in Basic Actuarial Mathematics: Students will be able to explain basic terms and concepts in actuarial mathematics, such as basic knowledge of insurance, risk management, and interest theor
- Application of Probability/Statistics in Actuarial Science: Students will be able to employ fundamental probability tools for quantitatively assessing risk and solving actuarial problems.
- Knowledge in Mathematical Finance: Students will use the fundamental concepts of financial mathematics
 - to demonstrate the ability to calculate present and accumulated values for various streams of cash flow as a
 - basis for future use in reserving, valuation, pricing, asset/liability management, invest income, capital budgeting, and valuing contingent cash flows.
- Mathematical Statistical Modeling: Students will use mathematical-finance modeling in solving business problems in a variety of fields, including insurance, finance, investment, and other businesses.
- Data Analysis: Students will analyze data from applications in a business context, determine a suitable model including parameter values, and provide measures of confidence for decisions based upon the model.
- Software Application: Students will demonstrate proficiency with programming in a standard statistical package, such as SAS or R.

IU Collaborative B.S. Actuarial degree requirements

To earn the B.S. in Actuarial Studies, students must complete the standard campus-and school-specific degree requirements, including the general education of their campus of enrollment, and the 77 hours required for the B.S. in Actuarial Studies.

The IU Online collaborative B.S. in Actuarial Studies requires 77 credits overall. Students must complete the indicated number of credits form each of the five degree components listed below:

- Mathematics (31 credit hours)
- Actuarial Science (9 credit hours)
- Programming/Computer Science (6 credit hours)
- Business and Economics (15 credit hours)
- Upper- level Actuarial Science which will doublecount towards a M.S. in Actuarial Science (15 credit hours)

I. Mathematics Core Courses (31 credits)

- 1. MATH-M 215 Calculus I (5 credits)
- 2. MATH-M 216 Calculus II (5 credits)
- MATH-M 301 Linear Algebra and Applications OR MATH-M 303 Linear Algebra (3 credits)
- 4. MATH-M 311 Calculus III (3 credits)
- MATH-M 313 Elementary Differential Equations with Applications OR MATH-M 343 Differential Equations (3 credits)
- MATH-M 447 Mathematical Modeling and Application I (3 credits)
- MATH-M 448 Mathematical Modeling and Application II (3 credits)

- 8. Complete one of the following two course/6 credit hour probability and statistics sequences:
- MATH-M 360 Elements of Probability and MATH-M 366 Elements of Statistical Inference*

OR

- MATH-M 463 Probability (3 credits) and MATH-M 466 Statistics (3 credits)**
- * Students taking the M360/M366 sequence for probability and statistics should complete MATH-M 367 Introduction to Statistical Programming in R in the Programming/ Computer Science Core (see below).
- **Students taking the M463/M466 sequence for probability and statistics should take STAT-I 421 Modern Statistical Modeling Using R and SAS in the Programming/Computer Science Core (see below).

II. Actuarial Science Core Courses (9 credits)

- 1. MATH-M 320 Theory of Interest (3 credits)
- MATH-M 445 Probability Theory for Risk Management (3 credits)
- 3. MATH-M 446 Financial Mathematics (3 credits)

III. Programming/Computer Science Core Courses (7 credits)

- 1. CSCI-A 201 Programming I, Python (4 credits)
- MATH-M 367 Introduction to Statistical Programming in R OR STAT-I 421 Modern Statistical Modeling Using R and SAS (3 credits)

IV. Business and Economics Core Courses (15 credits)

- ECON-E 103 or ECON-E 201 Introduction to Microeconomics (3 credits)
- ECON-E 104 or ECON-E 202 Introduction to Macroeconomics (3 credits)
- BUS-A 201 Introduction to Financial Accounting (3 credits)
- BUS-A 202 Introduction to Managerial Accounting (3 credits)
- 5. BUS-F 301 Financial Management (3 credits)

V. Actuarial Science Electives (15 credits)

Complete five of the following courses:

- MATH-M 451 Financial Math (3 credits)
- MATH-M 485 Life Contingencies I (3 credits)
- STAT-S 352 Data Modeling and Inference (3 credits)
- STAT-S 431 Applied Linear Models I (3 credits)
- STAT-S 432 Applied Linear Models II (3 credits)
- STAT-S 450 Time Series Analysis (3 credits)
- Additional electives may be added by the faculty at a later time.

Substitute Courses for Actuarial Science Electives

- STAT-S 437 Categorical Data Analysis (3 credits)
- STAT-S 460 Sampling (3 credits)
- STAT-S 412 Statistical Learning using R (3 credits)
- STAT-S 470 Exploratory Data Analysis (3 credits)

STAT-I 414 Introduction to Design of Experiments (3 credits)

Major in Applied Statistics - B.S. (ONLINE)

Learning Outcomes

- Define terms and concepts in mathematics and fundamental statistics.
- Solve problems in basic probability theory and basic statistical theory using appropriate tools, including calculus-based methods and linear algebra.
- Appropriately design data collection processes and ethically manage data.
- Identify appropriate statistical and mathematical procedures and use appropriate software tools for implementation.
- Draw inferences from data, big or small, using appropriate statistical methodology, including exploratory and graphical methods.
- Effectively communicate statistical reasoning and findings.

To earn the 120 credit hour B.S. in Applied Statistics, students must complete general education and other campus-specific requirements as well as the following Applied Statistics degree components:

Math Core (22 credits)

- MATH-M 215 Calculus I (5 credits)
- MATH-M 216 Calculus II (5 credits)
- MATH-M 301 Linear Algebra and Applications OR MATH-M 303 Linear Algebra (3 credits)
- MATH-M 311 Calculus III (3 credits)
- MATH-M 447 Mathematical Modeling and Application I (3 credits)
- MATH-M 448 Mathematical Modeling and Application II (3 credits)

Probability and Statistics Core (24 credits)

- 1. Complete one of the following three course/9 credit hour probability and statistics sequences
 - · MATH-M 360 Elements of Probability
 - MATH-M 366 Elements of Statistical Inference
 - MATH-M 367 Introduction to Statistical Programming in R

OR

- MATH-M 463 Probability (3 credits) and
- MATH-M 466 Statistics (3 credits)
- STAT-I 421 Modern Statistical Modeling Using R and SAS (3 credits)

Other combinations are possible. Consult an advisor.

- 2. Complete all of the following courses (15 credits)
 - STAT-S 431 Applied Linear Modeling
 - STAT-S 437 Categorical Data Analysis
 - STAT-S 412 Statistical Learning Using R
 - STAT-S 470 Exploratory Data Analysis
 - STAT-S 352 Data Modeling and Inference
- 3. Complete four upper-level electives (12 credits)
 - STAT-S 432 Applied Linear Models II

- STAT-S 450 Time Series Analysis
- STAT-S 460 Sampling
- STAT-I 414 Introduction to Design of Experiments
- Additional electives may be added by the faculty at a later time.

Programming (4 credits)

CSCI-A 201 Introduction to Programming, Python (4 credits)

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.

Minor in Mathematics

An arts and sciences minor in mathematics consists of the courses

- MATH-M 215 (5 cr.)
- MATH-M 216 (5 cr.)
- two (2) mathematics courses above 200 level, and
- Select one of the following
 - CSCI-C 201, CSCI-A 201, PSY-K300 or
 - any mathematics or Calculus-based Science course at the 200 level or above

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.)
- MATH-M 391 (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 Department of Mathematics and Actuarial Science department. Most 300 and 400 level mathematics courses are offered every other year.

Graduate Certificate in Mathematics

The 18 credit Graduate Certificates in Mathematics requirements are broken down as follows:

- · Core course (9 cr)
- · Electives (9 cr)

Students in the GC in Mathematics will cover the following content areas -

- Algebra—Topics include Group Theory, Ring Theory, Field Theory, Commutative and Noncommutative Algebra, Number Theory, and other topics.
- Analysis—Topics include Real Analysis, Complex Analysis, Fourier Analysis, and others.
- Topology and Geometry.-Topics include Euclidean and non-Euclidean Geometry, Point set topology, Differential Topology, Differential Geometry, and others.
- Differential Equations and Applications—Topics include Numerical Methods, Mathematics of Finance, Graph Theory, Mathematical Physics, and others.
- Probability and Statistics—Key concepts.

Certificate Requirements (six courses/18 cr)

The curriculum for the Graduate Certificate in Mathematics uses five topics course numbers with titles aligned to the standard categories covered by the program:

- 1. MATH T601 Topics in Algebra
- 2. MATH T610 Topics in Analysis
- 3. MATH T620 Topics in Topology/Geometry
- 4. MATH T640 Topics in Differential Equations and Applications
- 5. MATH T650 Topics in Probability/Statistics
- · Topics for each one of the classes will vary from one semester to the next.
- Students will need to use at least one repeat enrollment in one of these classes (with a distinct topic) to complete the six classes required for the certificate.
- To ensure breadth of knowledge, students must include at least three different course numbers/topics among the six classes they complete to earn the certificate.
- Depending upon areas of interest and the availability of distinct topics, some students may complete any one of these classes two to three times as a part of the six classes required for the graduate certificate

M.A.T. in Mathematics

The IU Online Master of Arts for Teachers in Mathematics combines coursework in education and mathematics to prepare you to be a dual-credit instructor at the high school and community college levels.

Program Learning Outcomes

Upon completion of the Master of Arts for Teachers in Mathematics, student

will develop graduate-level knowledge in three of the following five areas of mathematics:

1. Core applications of Algebra including Group Theory, Ring Theory, Field Theory,

Commutative and Noncommutative Algebra, Number Theory, and other topics in Algebra.

- 2. Analysis applications. Topics covered in this area include Real Analysis, Complex Analysis, Fourier Analysis, and other topics in Analysis.
- 3. Essential concepts of Topology/Geometry including topics in Euclidean and non-Euclidean Geometry, Point set topology, Differential Topology, Differential Geometry and other topics in Topology/Geometry.
- 4. Differential Equations and Applications including Numerical Methods, Mathematics of Finance, Graph Theory, Mathematical Physics, and other topics.
- 5. Key concepts of Probability/Statistics.

Upon completion of the Education component of the M.A.T. in Mathematics, graduates will be able to—

- 1. Engage in the development of rigorous curriculum planning and design;
- 2. Promote college-level studies skills and habits of mind;
- 3. Use assessment data to inform college-level instructional practices;
- 4. Prepare dual-credit students for success in college-level assessments;
- 5. Conduct research to improve dual-credit instruction.

MAT Requirements

The 30 credit MAT in Mathematics requirements are broken down as follows:

- · Core course (9 cr)
- · Electives (9 cr)
- Education component (12 cr)

The Mathematics component of the MAT in Mathematics is identical to the curriculum of the stand-alone IU collaborative Graduate Certificate in Mathematics.

Students in the MAT in Mathematics will cover the following content areas -

- Algebra—Topics include Group Theory, Ring Theory, Field Theory, Commutative and Noncommutative Algebra, Number Theory, and other topics.
- Analysis—Topics include Real Analysis, Complex Analysis, Fourier Analysis, and others.
- Topology and Geometry--Topics include Euclidean and non-Euclidean Geometry, Point set topology, Differential Topology, Differential Geometry, and others.
- Differential Equations and Applications—Topics include Numerical Methods, Mathematics of Finance, Graph Theory, Mathematical Physics, and others.
- Probability and Statistics—Key concepts.

Degree Requirements

I. Mathematics Component (18 cr)

The curriculum for the Graduate Certificate in Mathematics uses five topics course numbers and titles aligned to the standard categories covered by the program:

- 1. MATH T601 Topics in Algebra
- 2. MATH T610 Topics in Analysis
- 3. MATH T620 Topics in Topology/Geometry
- 4. MATH T640 Topics in Applications
- 5. MATH T650 Topics in Probability/Statistics

Topics for each one of the classes will vary from one semester to the next, and students will need to use at least one repeat enrollment to complete the six classes required for the certificate, and depending upon the students' interests and the availability of distinct topics, some students may complete any one of these classes two to three times as a part of the six classes required for the graduate certificate.

II. MAT Mathematics—Education Component (12 cr)

To fulfill the Education Component of the MAT in Biology, students complete:

- 1) EDUC-H 520 Education and Social Issues
- 2) EDUC-J 500 Instruction in the Context of Curriculum
- 3) EDUC-P 507 Assessment in Schools
- 4) EDUC-Y 520 Strategies for Educational Inquiry

Minority Studies

Phone: (219) 980-6629

Website: http://www.northwest.iu.edu/minority-studies/

About the Department

The Department of Minority Studies offers programs leading to the Bachelor of Arts degree in African American and African Diaspora 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.

Learning Outcomes

Graduates will:

- Demonstrate understanding of cultural diversity in a variety of contexts.
- Demonstrate understanding of the relationships between social structures, social justice, and human rights.
- Demonstrate understanding of racial minority experiences and diverse worldviews and the manner in which they shape U.S. culture and the world.

African American and African Diaspora Studies

The curriculum leading to a Bachelor of Arts degree in African American and African Diaspora 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 African American and African Diaspora Studies with a concentration in Latino Studies.

Learning Outcomes

- Goal 1. Development of critical thinking skills
- Goal 2. Development of analytical thinking skills
- Goal 3. Development of oral communication skills
- Goal 4. Development of written communication skills
- Goal 5. Development of academic research skills
- Goal 6. Practical engagement with minority worldviews and experiences

Major in African American and African Diaspora Studies

Requirements - a minumum of 30 cr.

- Required
 - AAAD-A 103 (3 cr.)
 - AAAD-A 301 (3 cr.)
 - AAAD-A 343 (3 cr.)
 - Select one of the following (3 cr.)
 - AAAD-A 150 Survey of the Culture of Black Americans (3 cr.)
 - AAAD-A 151 Minority People in the United States (3 cr.)
 - Select from the following Afro-American History and Culture courses(6 cr.)
 - AAAD-A 355 Afro-American History I (3 cr.)
 - Select one from the following
 - AAAD-A 379 Early Black American Writing (3 cr.)
 - AAAD-A 356 Afro-American History II (3 cr.)
 - AAAD-A 370 Recent Black American Writing (3 cr.)
 - AAAD-A 380 Contemporary Black American Writing (3 cr.)
 - Other courses in African American and African Diaspora 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 African American and African Diaspora Studies and Communication

The Departments of Communication and Minority Studies offer an interdepartmental major in African American and African Diaspora studies and communication that reflects an interdisciplinary and substantive field of study. An interdepartmental major in communication and African American and African Diaspora studies focuses the specialization of the study of the human communication process within the African American and African Diaspora experience. This focus enhances the application of principles, methods, and findings of communication studies in light of the history, culture, and theories of the African American and African Diaspora 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 African American and African Diaspora 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

- African American and African Diaspora studies (18 cr.)
 - Select one of the following
 - AAAD-A 150 (3 cr.)
 - AAAD-A 151 (3 cr.)
 - Select one of the following
 - AAAD-A 355 (3 cr.)
 - AAAD-A 379 (3 cr.)
 - Select one of the following
 - AAAD-A 356 (3 cr.)
 - AAAD-A 370 (3 cr.)
 - AAAD-A 380 (3 cr.)
- African American and African Diaspora 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 AAAD-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 AAAD-A 398

Total (45 cr.)

Interdepartmental Major in African American and African Diaspora Studies and English

The Departments of Minority Studies and English offer a thematically integrated major in African American and African Diaspora Studies and English. This interdepartmental major is designed for students who wish to combine substantial African American and African Diaspora Studies with their work in the American and English literature major. African American and African Diaspora Studies is importantly multidisciplinary, requiring students to be familiar with the connected history and theories of the African American and African Diaspora experience across disciplines, including an Africana perspective. The interdepartmental major in African American and African Diaspora Studies and English provides students with this background as well as

with an understanding of African American and African Diaspora 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 African American and African Diaspora 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 33 credit hours is required.

- African American and African Diaspora Studies 300 level or above (18 cr.)
 - AAAD-A 355 (3 cr.)
 - AAAD-A 356 (3 cr.)
 - AAAD-A 493 (multidisciplinary capstone course) (3 cr.)
 - Select from the following (9 cr.)
 - AAAD-A 370 (3 cr.)
 - ENG-L 370 (3 cr.)
 - AAAD-A 379 (3 cr.)
 - AAAD-A 380 (3 cr.)
 - AAAD-A 392 (3 cr.)
- English (15 cr.)
 - ENG-L 202 (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 (33 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 African American and African Diaspora Studies

Requirements

- · Select one of the following
 - AAAD-A 150 (3 cr.)
 - AAAD-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.)

Latinx Studies

Latinx 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 Latinx people while also examining the nature of minority groups in American society. 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 Latinx 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 African American and African Diaspora 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

- AAAD-A 151 / CHRI-C 151 Minority People in the United States (3 cr.)
- 4 courses from the listings for the Department of Minority Studies meeting the following distribution pattern (12 cr.)
 - 2 courses from course listings in African American and African Diaspora 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
 - AAAD-A 150
 - AAAD-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.)
 - AAAD-A 103
 - AAAD-A 230
 - AAAD-A 240
 - AAAD-A 301
 - AAAD-A 302
 - AAAD-A 304
 - AAAD-A 341
 - AAAD-A 343AAAD-A 398
 - (2) credit hours in capatone, research or proje

Three (3) credit hours in capstone, research or project course.

Race-Ethnic Studies

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
 - AAAD-A 150
 - AAAD-A 151
- CHRI-C 151 Minority People (3 cr.)
- Department of Minority Studies, must be distributed between Latino Studies and African American and African Diaspora Studies (12 cr.)
- Capstone or research course, must be interdisciplinary (3 cr.)

Modern Languages, Comparative Literature, and Linguistics

Phone: (219) 980-6714

Website: http://www.northwest.iu.edu/modern-languages/

French

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

Major in French

Learning Outcomes

We are trying to prepare our students better in terms of speaking and general communication since feedback from them has indicated that this is a desired outcome. Thus, in all courses, we have shifted our focus to much more speaking, with each outcome shown below:

- Function at the Advance-high level in speaking in French
- Function at the Advance-high level in listening in French
- Function at the Advance-high level in reading in French
- Function at the Advance-high level in writing in French

Requirements

- FREN-F 200 and FREN-F 250 or equivlalents (6 cr.)
- Chosen among FREN-F 300, FREN-F 305, FREN-F 306, FREN-F 328, FREN-F 375, FREN-F 380, and FREN-F 391 (12 cr.)
- 400 level courses (9 cr.)
- · Select one of the following
 - SPAN-S 100 (or a more advanced course taught in Spanish)
 - GER-G 100 (or a more advanced course taught in German)
 - ITAL-M 100 (or a more advanced course taught in Italian)
 - Select from the following list of culture options (3 cr.)
 - SPAN-S 231
 - SPAN-S 240
 - SPAN-S 260
 - SPAN-S 284
 - SPAN-S 290
 - CDNS-C 101
 - CDNS-C 301
 - CDNS-C 350
 - CDNS-C 400
 - CDNS-C 495
 - CMLT-C 261CMLT-C 340
 - CIVIL 1-C 340

LING-L 103

Total (30 cr.)

Minor in French

Minor in French Requirements (15cr.):

- FREN-F 200 and 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

Special credit may be awarded for the two highest courses a student tests out of (100, 150, 200, or 250), up to a maximum of 8 credits.

Foreign Study

Outstanding students who want to participate in a oneyear academic program are encouraged to apply for the program offered in Aix-en-Provence, France. In addition, IU offers semester and summer programs in various locations throughout France and Canada. These programs can be used to fulfill requirments for the baccalaureate degree. For a descritpion of all French program options visit: http://overseas.iu.edu/programs/juprograms/languages/french.shtml.

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.

Major in French (B.S. Online)

The IU Online BS in French offers instruction in French language, culture, and history through a rigorous curriculum. Develop language proficiency, cultural facility, and professional competence in French environments. This program encourages you to employ critical thinking skills, analytical skills, and historical contexts in your work—and to think sensitively about French and Francophone cultures and ethnicities.

Learning Outcomes

- Demonstrate understanding of diverse fields of French and its applications.
- Exhibit communicative competence in language skills (Speaking, Listening, Writing, Reading).
- Use knowledge of the French language and cultures to develop critical thinking skills.
- Complete one of three program-sponsored area minors (French for Medical Communication, French for Business, French for Cultural Tourism) to apply their command of the French language and knowledge of Francophone Culture in a variety of real world settings.

Degree Requirements

To Earn the IU Collaborative B.S. in French, students must complete all seven components of the major.

1) Intermediate French I (3 cr)

Students complete one of two course options:

FREN F200/F203

2) Intermediate French II (3 cr)

Students complete one of two course options:

FREN F250/F204

3) Advanced French Grammar (3 cr)

Students complete one of two course options:

FREN-F 328 Advanced French Grammar and Composition

FREN-F 313 Advanced French Grammar and Composition I

4) Spoken French (3 cr)

Students complete one of two course options:

FREN-F 315 Conversation and Diction I

FREN-F 316 Conversation and Diction II

5) Upper-Level Coursework French—Applied and Cultural (15 cr)

Students complete five classes chosen from the following list:

FREN-F 300 Lectures et Analyses Litteraires

FREN-F 306 Chefs-d'œuvre de la Literature French 2

FREN-F 330 Intro to Translating French and English

FREN-F 350 Topics in Francophone Culture

FREN-F 363 Introduction à la France Moderne

FREN-F 391 Studies in French Film

FREN-F 415 La Culture Francophone

FREN-F 450 Colloquium in French Studies

FREN-F 463 Civilisation Française I

FREN-F 475 Advanced Oral Practice I

FREN-F 480 French Conversation

FREN-Y 396 Study Abroad

6) Capstone and Career/Professional Preparation (3 cr)

FREN-F 496 French Capstone

7) Applied French Tracks (12 Unique cr)

Students complete one of the following three Applied French tracks:

- 1. Medical Communication in French (five classes/15 cr)
- 2. French for Business (five classes/15 cr)
- 3. Francophone Culture for Travel (five classes/15 cr)

Each track consists of five classes. The first course is one of the upper-level courses taught in French, which also counts as one of the five classes required to satisfy requirement #5. The remaining four courses on topical courses taught in English that related to the focus of the track.

Option 1: Medical Communication in French

- Complete one of the following courses in French Translation (3 credits)
- FREN-F 330 Introduction to Translating French and English
- · FREN-F 350 Topics in Francophone Culture
- ** When offered, F350 will be taught as three consecutive one-credit classes. BS French students must complete all three courses for the Medical Communication in French Track.
 - 1. Medical Terminology (1-2 credits)

- AHLT-R 185/HIM-M 195 Medical Terminology
- 1. Systems of Healthcare Delivery (3 credits)
- AHLT-B 311/BUS-H 320 Systems of Healthcare Delivery
- 1. Cross Cultural Communication (3 credits)
- CMCL-C 427/ SPCH-S 427 Cross Cultural Communication
- 1. Health Disparities (3 credits)
- · SPEA-H 452 Health Disparities

Option 2: French for Business

- 1. French Translation (3 credits)
- FREN-F 330 Introduction to Translating French and English OR
- FREN-F 350 Topics in Francophone Culture
- ** When offered, F350 will be taught as three consecutive one-credit classes. BS French students must complete all three courses for the French for Business Track.
 - 1. International Business (3 credits)
 - BUS-D 300 International Business: Operations of International Enterprises
 - BUS-D 301 International Business Environment
 - 1. Public Relations (3 credits)
 - SPCH-S 333 Public Relations
 - 1. Presentations (3 credits)
 - SPCH-S 335 Media and Health
 - 1. Cross Cultural Communication (3 credits)
 - CMCL-C 427/ SPCH-S 427 Cross Cultural Communication

Option 3: Francophone Culture for Travel

- Complete one of the following courses in French/ Francophone Culture (3 credits)
- FREN-F 300 Lectures et Analyses Litteraires
- FREN-F 391 Studies in French film
- 1. Cross Cultural Communication (3 credits)
- CMCL-C 427/ SPCH-S 427 Cross Cultural Communication
- 1. Tourism, Planning and Development (3 credits)
- TESM-T 107 Tourism Planning and Development
- 1. Tourism, Policy, and Sustainability (3 credits)
- TESM-T 207 Tourism, Policy, and Sustainability
- 1. Cultural Heritage Tourism (3 credits)
- TESM-T 234 Cultural Heritage Tourism

BS French students may petition to replace one of the Applied French track courses. Interested students should consult their academic advisor.

Master of Arts for Teachers in French

Program Learning Outcomes

Upon completion of the Master of Arts for Teachers in French, students will be able to:

- 1. Demonstrate proficiency in French through the ability to complete graduate coursework in French.
- 2. Achieve a comprehensive understanding of French as a living language and Francophone cultures.
- 3. An understanding of the core concepts and applications of Second Language Acquisition
- 4. Introduce and practice various foreign language teaching methodologies
- 5. Develop individual teaching styles informed by current theory and scholarship

MAT French Degree Requirements

To earn the thirty credit MAT in French students must complete the following coursework:

I. Core coursework (9 cr)

- 1. FRIT-F580 Applied French –Linguistics (3 cr)
- 2. FRIT-F673 Topics in Learning and Teaching of French (3 cr)
- 3. FRIT-F606/FREN-F606 Capstone Project in French Teaching (3 cr) (completed near conclusion of the program)

II. Two courses in French/Francophone Studies (500 level or above) (6 cr)

FRIT-F 556 Le Roman aux XXe et XXe siècles (3 cr)

FRIT-F 632 Seventeenth-Century French Drama and Performance (3 cr)

FRIT-F 635 Studies in Eighteenth-Century French Literature (3 cr)

FRIT-F 640 Studies in Nineteenth-Century French Literature (3 cr)

FRIT-F 651 Studies in French Cinema (3 cr)

FRIT-F 667 Seminar in Francophone Studies (3 cr)

FREN-F 525 Readings in French and Francophone Cultures (3 cr)

RIT-F 561 Studies in French Civilization

III. One French Linguistics course (in addition to F580) (500 level or above) (3 cr)

FRIT-F 578 Contrastive Study of French and English (3 cr)

FRIT-F 603 History of the French Language 1 (3 cr)

FREN-F 531 Readings in French Language and Linguistics (3 cr)

IV. One course in Foreign Language Methodology, Applied Linguistics and Language Acquisition (3 cr)

FREN-542 Readings in French Pedagogy and Language Acquisition

V. Three additional courses taken from any one of the above 3 categories (9 cr)

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

Learning Outcomes

- Function at the Advance-high level in speaking in Spanish
- Function at the Advance-high level in listening in Spanish
- Function at the Advance-high level in reading in Spanish
- Function at the Advance-high level in writing in Spanish

Requirements

- SPAN-S 200 and SPAN-S 250 (6 cr.)
- Chosen among SPAN-S 311, SPAN-S 312, SPAN-S 317, SPAN-S 323, SPAN-S 360, and SPAN-S 363 (12 cr.)
- 400 level courses (9 cr.)
- Select one of the following
 - FREN-F 100 (or a more advanced course taught in French)
 - GER-G 100 (or a more advanced course taught in German)
 - ITAL-M 100 (or a more advanced course taught in Italian)
 - Select from the following list of culture options (3 cr.)
 - FREN-F 309
 - FREN-F 310
 - FREN-F 311
 - FREN-F 312
 - FREN-F 341CMLT-C 261
 - CMLT-C 340
 - CDNS-C 101
 - CDNS-C 301
 - CDNS-C 350
 - CDNS-C 400
 - CMLT-C 460
 - CDNS-C 495
 - LING-L 103
- 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.

Total (30 cr.)

Minor in Spanish

Minor in Spanish Requirements (15cr.):

SPAN-S 200 and 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

Special credit may be awarded for the two highest courses a student tests out of (100, 150, 200, or 250), up to a maximum of 8 credits.

Native Speakers

Students who are native speakers of Spanish must get permission from the department to enroll in any third-year or fourth-year level Spanish courses. Questions about the major or minor should be directed to the department chair.

Foreign Study

Qualified students who want to participate in a oneyear academic program are encouraged to apply for the program offered in Madrid, Spain. In addition, IU offers programs in various locations throughout Spain and Latin America. Summer study programs are available in Bilbao and Salamanca, Spain. These programs can be used to fulfill requirements for the baccalaureate degree.

For a description of all Spanish program options: http://overseas.iu.edu/programs/iuprograms/languages/spanish.shtml.

Courses in English

The following Spanish courses are taught in English

- SPAN-S 231
- SPAN-S 240
- SPAN-S 260
- SPAN-S 284
- SPAN-S 290

No credit in Spanish.

Major in Spanish (B.S. Online)

Learning Outcomes

- 1) Exhibit communicative competence in language skills (Speaking, Listening, Writing, and Reading).
- 2) Demonstrate understanding of diverse fields of Spanish and its applications.
- 3) Use knowledge of the Spanish language and Hispanic cultures to develop critical thinking skills.
- 4) Apply Spanish language and knowledge of Hispanic Cultures in a variety of real-world settings using skills developed in Spanish major courses and one of four program-sponsored minors.

Degree Requirements:

To Earn the IU Collaborative B.S. in Spanish, students must complete all eight components of the major as listed below:

1) Intermediate Spanish I (3 cr)

Students complete one of two course options:

SPAN-S200/S203 Second-Year Spanish I

2) Intermediate Spanish II (3 cr)

Students complete one of two course options:

SPAN-S250/S204 Second-Year Spanish II

3) Spanish Conversation (3 cr)

Students complete one of two course options:

SPAN-S 275 Hispanic Culture and Conversation or SPAN-S 317 Spanish Conversation and Diction

4) Spanish Grammar and Composition (3 cr)

Students complete one of four course options:

HISP-S 308 Composition and Conversation in Spanish or SPAN-S 311 Spanish Grammar or

SPAN-S 313 Writing Spanish I or

SPAN-S 312 Written Composition in Spanish

5) Literary Analysis in Spanish

Students complete one of three course options:

SPAN-S 301 Hispanic World I

SPAN-S 302 Hispanic World II

SPAN-S 360 Introduction to Hispanic Lit

6) Upper-Level Coursework Spanish—Applied and Cultural (15 cr)

Students complete five classes chosen from the following list:

SPAN-S 315 Spanish in the Business World

SPAN-S 318 Writing Spanish for Heritage Speakers

SPAN-S 319 Spanish for Healthcare Personnel

SPAN-S 323 Introduction to Translating Spanish and English

SPAN-S 326 Intro to Spanish Linguistics

SPAN-S 429 Medical Interpreting

SPAN-S 315 Spanish in the Business World

SPAN-S 323 Introduction to Translating Spanish and English

SPAN-S 423 The Craft of Translation

SPAN-S 326 Intro to Spanish Linguistics

SPAN-S 426 Intro to Spanish Linguistics

SPAN-S 468 Varieties of Spanish

SPAN-S 363 Introduction to Hispanic Culture

SPAN-S 370 Service Learning in Spanish

SPAN-S 381 Hispanic Civilization I

SPAN-S 382 Hispanic Civilization II

SPAN-S 383 Hispanic Civilization III

SPAN-S 384 Hispanic Civilization IV

SPAN-S 410 Contemporary Hispanic Culture and Conversation

SPAN-S 411 Spanish Culture and Civilization

SPAN-S 412 Latin American Culture and Civilization

SPAN-S 413 Hispanic Culture in the U.S.

SPAN-S 423 The Craft of Translation

SPAN-S 426 Intro to Spanish Linguistics

SPAN-S 429 Medical Interpreting

SPAN-S 440 Hispanic Sociolinguistics

SPAN-S 468 Varieties of Spanish

SPAN-S 390 Special Topics in Spanish

SPAN-S 493 Internship Program in Spanish

SPAN-S 495 Hispanic Colloquium

**Students should select at least one upper-level course that also satisfies one of the requirements for the Applied Spanish tracks described below. See Requirement #8.

7) B.S. Spanish Capstone

SPAN-S 498 Capstone Seminar in Spanish

8) Applied Spanish Tracks (15 Unique cr)

Each track consists of six classes. The first two courses also count in one of the upper-level courses taught in Spanish, which also counts as two of the six classes required to satisfy requirement #6. The remaining four courses on topical courses taught in English that relate to the focus of the track.

Students complete one of the following four Applied Spanish tracks:

Track Option #1: Medical Communication in Spanish (six classes/18 cr)

- 1. SPAN-S 319 Spanish for Healthcare Personnel
- 2. SPAN-S 429 Medical Interpreting
- 3. AHLT-R 185/HIM-M 195 Medical Terminology
- 4. AHLT-B 311/BUS-H 320 Systems of Healthcare Delivery
- 5. CMCL-C 427/ SPCH-S 427 Cross Cultural Communication
- 6. SPEA-H 452 Health Disparities

Track Option #2: Spanish in the Business World (six classes/18 cr)

- 1. SPAN-S 315 Spanish in the Business World
- 2. SPAN-S 323 Introduction to Translation or SPAN-S 410 Contemporary Hispanic Culture and Conversation
- 3. BUS-D 300 International Business: Operations of International Enterprises or BUS-D D301 International Business Environment
- 4. SPCH-S 333 Public Relations
- 5. SPCH-S 335 Media and Health
- 6. SPCH-S/CMCL-C 427 Cross Cultural Communication

Track Option #3 Hispanic Culture for Travel and Tourism (six classes/18 cr)

1.& 2. Choose two Spanish/ Hispanic Culture Courses Taught in Spanish

SPAN-S 363 Intro A La Cultura Hispanica

SPAN-S 390 Special Topics Spanish

SPAN-S 370 Service Learning in the Dominican Republic SPAN-S 495 Hispanic Colloquium

- 3. SPCH-S 427 Cross Cultural Communication (NW, SB, KO)
- 4. TESM-T 107 Tourism Planning and Development
- 5. TESM-T 207 Tourism, Policy, and Sustainability
- 6. TESM-T 234 Cultural Heritage Tourism

Track Option #4: Hispanic Culture in the U.S. (six classes/18 cr)

1.& 2. Choose two Spanish/ Hispanic Culture Courses Taught in Spanish

SPAN-S 363 Intro A La Cultura Hispanica SPAN-S 318 Writing Spanish for Heritage Speakers SPAN-S 413 Hispanic Culture in the U.S.

SPAN-S 412 Spanish America: The Cultural Context

SPAN-S 440 Hispanic Sociolinguistics

SPAN-S 468 Varieties of Spanish

3, 4, 5, 6. Choose four Hispanic Culture Courses Taught in English

LATS-L 350 Contemporary Issues in Latino Studies

LATS-L 396 Topics in Latino Studies

LATS-L 228 U.S. Latino/a Identities

SPAN-S 284 Women in Hispanic Culture (Taught in English)

SPAN-S 290 Topics in Hispanic Culture (Taught in English)

SPAN-S 303 The Hispanic World (Taught in English) SPAN-S 390 Special Topics in Spanish (Taught in

SPAN-S 390 Special Topics in Spanish (Taught in Spanish

SPAN-S 260 Introduction to Hispanic Film (Taught in English)

SPAN-S 231 Spanish-American Fiction in Translation (Taught in English)

Graduate Certificate in Spanish (Online)

This program will equip K-12 Spanish teachers and dual-credit instructors with pedagogical training in Spanish to enable them to teach the target language more effectively. Each course in the certificate will emphasize communication in Spanish to help students to improve and refine their own mastery of Spanish. Students completing the certificate will:

- Enhance their proficiency with the Spanish language and their confidence to conduct classes in the target language.
- · Increase their expertise in areas of Hispanic culture, literature and linguistics.
- Expand their teaching techniques and approaches in light of current practices informed by research. Students earning the IU Online Graduate Certificate in Spanish will:
- 1. Increase their Spanish language competence.
- 2. Enhance intercultural competence to promote student engagement and understanding of the Hispanic world.
- 3. Use effective pedagogical strategies to serve a variety of learning populations including heritage speakers, adult students, etc.
- 4. Promote an understanding of Spanish as a world language as well as the linguistic and cultural diversity of Spanish in the U.S.
- 5. Incorporate insights gleaned from current research on second language acquisition and scholarship on effective foreign language instruction to improve student learning.
- 6. Design structured input and output activities by applying theory to classroom activities, such as communicative teaching, oral and grammar testing, learning and teaching grammar, listening comprehension, and writing.

Degree Requirements

To earn the Graduate Certificate in Spanish students will complete 18 credits graduate

- SPAN-T 510 Second Language Acquisition for Spanish
- 2. SPAN-T 520 Spanish Writing and Grammar
- 3. SPAN-T 530 Spanish through Cultural Expressions
- 4. SPAN-T 540 Spanish Phonetics
- 5. SPAN-T 550 Hispanic Studies (variable topics)

6. SPAN-T 560 Hispanic Sociolinguistics

German

Foreign Study

Qualified students who want to participate in a one-year program are encouraged to apply for the program offered in Freiburg, Germany. In addition, IU offers semester and summer programs in various locations throughout Germany and Austria. These programs can be used to fulfill requirements for the baccalaureate degree. For a description of all German program options visit: http://overseas.iu.edu/programs/iuprograms/languages/german.shtml.

Italian

Foreign Study

Qualified students who want to participate in a one-year program are encouraged to apply for the program offered in Bologna, Italy. In addition, IU offers semester and summer programs in various locations throughout Italy.

These programs can be used to fulfill requirements for the baccalaureate degree. For a description of all Italian program options visit: http://overseas.iu.edu/programs/iuprograms/languages/italian.shtml.

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 consists of:

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.)
- CDNS-C 495 (3cr.)
- FREN-F 200 (3cr.)
- FREN-F 250 or equivalent (3cr.)

Total (15cr.)

Minor in Linguistics

Required courses:

From the Department of Modern Languages. Choose three courses from the following list:

- L103, Introduction to the Study of Language (3 cr) (every Summer. Online)
 - L200, Introduction to Language and Culture (3 cr) (occasionally)
 - L210, Topics in Language and Society (3 cr) (every other year)
 - L315, Introduction to Sociolinguistics (3 cr) (occasionally)
 - S426, Introduction to Hispanic Linguistics (3 cr) (occasionally)

L485, Topics in Linguistics (3 cr.) (every other year)

From the Department of English. Two required courses:

- G205, Introduction to the English Language (3 cr)
 - G207, Grammar and Usage (3 cr)

Total (15 cr.)

Psychology

Phone: (219) 980-6680

Website: http://northwest.iu.edu/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 neuroscience leading to a B.A. degree and the B.S. degree, minors in psychology and neuroscience, 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. Techniques and skills obtained in the B.A. and B.S. programs are applicable in many careers and provide background for students entering graduate work in psychology, neuroscience, 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 - Bachelor of Arts (B.A.)

Learning Outcomes

- Comprehension of basic psychological principles and theories from a variety of sub-areas and an ability to apply these theories and principles in specific situations.
- Knowledge of the scientific method as it applies to behavioral research.

- A working understanding of data analysis including graphic presentation and statistic (parametric and nonparametric).
- An ability to communicate in writing the rationale, method, results, and significance of research in which the student was an active participant.

Psychology Requirements (Va) (36 cr.)

- PSY-P 103 (3 cr.) prerequisites for all courses
- PSY-P 211 (3 cr.)
- PSY-P 222 (3 cr.)
- PSY-K 300 (3 cr.)
- 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.)
 - PSY-P 438 (3 cr.)
 - PSY-P 461 (3 cr.)
 - PSY-P 469 (3 cr.)
 - PSY-P 486 (3 cr.)
- Area B
 - Select a minimum of 2 of the following
 - PSY-B 322 (3 cr.)
 - 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 339 (3 cr.)
 - PSY-P 389 (3 cr.)
 - PSY-P 425 (3 cr.)
 - PSY-P 430 (3 cr.)
- Select 1 from the following which satisfies the capstone requirement
 - PSY-P 481 (3 cr.)
 - PSY-B 454 (3 cr.)
 - PSY-P 426 (3 cr.)
 - PSY-P 435 (3 cr.)
 - PSY-B 482 (3 cr.)
- Select three (3) additional 300-400 level psychology elective courses(9 cr.)

Total (36 cr.)

Students must also complete the core 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. 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, 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.

TSAP in Psychology - B.A.

Completion of an eligible AS or AA degree at Ivy Tech or Vincennes may put you on a Single Articulation Pathway to a BA or BS at IU Northwest, without a loss of credit hours.

For more information on the TSAP in Psychology see Single Articulation Pathways - Indiana University Northwest.

Major in Psychology - Bachelor of Science (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.

Learning Outcomes

- Comprehension of basic psychological principles and theories from a variety of sub-areas and an ability to apply these theories and principles in specific situations.
- Knowledge of the scientific method as it applies to behavioral research.
- A working understanding of data analysis including graphic presentation and statistic (parametric and nonparametric).
- An ability to communicate in writing the rationale, method, results, and significance of research in which the student was an active participant.

Psychology Requirements (Va) (36 cr.)

- PSY-P 103 (3 cr.) prerequisites for all courses
- PSY-P 211 (3 cr.)
- PSY-P 222 (3 cr.)
- PSY-K 300 (3 cr.)
- 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.)
 - PSY-P 438 (3 cr.)
 - PSY-P 461 (3 cr.) PSY-P 469 (3 cr.)

 - PSY-P 486 (3 cr.)
- Area B
 - Select a minimum of 2 of the following

- PSY-B 322 (3 cr.)
- 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 339 (3 cr.)
- PSY-P 389 (3 cr.)
- PSY-P 425 (3 cr.)
- PSY-P 430 (3 cr.)
- Select 1 from the following which satisfies the capstone requirement
 - PSY-P 426 (3 cr.)
 - PSY-P 435 (3 cr.)
 - PSY-P 481 (3 cr.)
 - PSY-B 454 (3 cr.)
 - PSY-B 482 (3 cr.)
- Select 2 additional 300-400 level psychology elective courses (6 cr.)
- Allied Disciplines Requirements (Vb) (20 cr.)
 - Non-psychology courses listed under the category Group IIIA at the 100 level or above, including at least 6 credits at the 200+ level and at least 2 laboratory courses

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

Major in Neuroscience - Bachelor of Arts (B.A.)

Neuroscience Program Objectives

When they successfully complete the Neuroscience program at Indiana University Northwest, students will:

- Demonstrate a solid understanding of the concepts and methodologies of the interdisciplinary field of neuroscience on a molecular, cellular, systems, and behavioral level.
- Read, analyze, and critically evaluate primary literature in neuroscience.
- 3. Clearly communicate scientific information in written and oral formats.
- Demonstrate a clear understanding of the main research approaches, techniques, and topics in neuroscience by ethically designing and conducting experiments.

Neuroscience Requirements (68-69 cr.)

- PSY-P 103 General Psychology I (3 cr.)
- PSY-P 326 Behavioral Neuroscience (3 cr.)
- PSY-P 211 Methods of Experimental Psychology (3 cr.)
- PSY-K 300 Statistical Techniques (3 cr.)
- BIOL-L 101 Introduction to the Biological Sciences I (with lab, 4 cr.)
- BIOL-L 211 Molecular Biology (3 cr.)
- CHEM-C 105/C125/C106/C126 General Chemistry I and II (with labs, 10 cr.)

- MATH-M 215 Calculus I (5 cr.)
- PHIL-P 393 Biomedical Ethics (3 cr.)
- CSCI-C 150 Procedures and Problem Solving (3 cr.)
- CSCI-C 201 Computer Programming II (4 cr.)
- Choose one basic non-neuroscience course from the following (4-5 cr.):
 - PHSL-P261, BIOL-L311 (with lab), BIOL-L 312 (with lab), CHEM-C 342/C344; MATH-M 216, PHYS-P201, PHYS-P 202, PHYS-P 221, PHYS-P 222
- Choose four advanced Neuroscience courses from the following (12 cr.):
 - PSY-P 407 Drugs and the Nervous System
 - PSY-P 329 Sensation and Perception
 - PSY-P 469 Stress Effects on Brain and Behavior
 - PSY-P 388 Special Topics in Experimental Psychology (approved topics)
 - PSY-P 486 The Neuroscience of Suicidal Behavior
 - BIOL-Z 466 Endocrinology
 - BIOL-L 318 Evolution
 - PHSL-P 417 Neurobiology
- Capstone/advanced lab (3 cr.): PSY-P 426 Laboratory in Behavioral Neuroscience

Total (68-69 cr.)

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

Major in Neuroscience - Bachelor of Science (B.S.)

Neuroscience Program Objectives

When they successfully complete the Neuroscience program at Indiana University Northwest, students will:

- Demonstrate a solid understanding of the concepts and methodologies of the interdisciplinary field of neuroscience on a molecular, cellular, systems, and behavioral level.
- 2. Read, analyze, and critically evaluate primary literature in neuroscience.
- Clearly communicate scientific information in written and oral formats.
- Demonstrate a clear understanding of the main research approaches, techniques, and topics in neuroscience by ethically designing and conducting experiments.

Neuroscience Requirements (68-69 cr.)

- PSY-P 103 General Psychology I (3 cr.)
- PSY-P 326 Behavioral Neuroscience (3 cr.)
- PSY-P 211 Methods of Experimental Psychology (3 cr.)
- PSY-K 300 Statistical Techniques (3 cr.)
- BIOL-L 101 Introduction to the Biological Sciences I (with lab, 4 cr.)
- BIOL-L 211 Molecular Biology (3 cr.)
- CHEM-C 105/C125/C106/C126 General Chemistry I and II (with labs, 10 cr.)

- CHEM-C 341/CHEM-C 343 Organic Chemistry I (with lab, 5 cr.)
- MATH-M 215 Calculus I (5 cr.)
- PHIL-P 393 Biomedical Ethics (3 cr.)
- CSCI-C 150 Procedures and Problem Solving (3 cr.)
- CSCI-C 201 Computer Programming II (4 cr.)
- Choose one basic non-neuroscience course from the following (4-5 cr.):
 - PHSL-P261, BIOL-L311 (with lab), BIOL-L 312 (with lab), CHEM-C 342/C344; MATH-M 216, PHYS-P201, PHYS-P 202, PHYS-P 221, PHYS-P 222
- Choose four advanced Neuroscience courses from the following (12 cr.):
 - PSY-P 407 Drugs and the Nervous System
 - PSY-P 329 Sensation and Perception
 - PSY-P 469 Stress Effects on Brain and Behavior
 - PSY-P 388 Special Topics in Experimental Psychology (approved topics)
 - PSY-P 486 The Neuroscience of Suicidal Behavior
 - BIOL-Z 466 Endocrinology
 - BIOL-L 318 Evolution
 - PHSL-P 417 Neurobiology
- Capstone/advanced lab (3 cr.): PSY-P 426 Laboratory in Behavioral Neuroscience

Total (68-69 cr.)

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

Minor in Psychology Requirements

Students who elect to minor in psychology must complete the following

- PSY-P 103 (3 cr.)
- Any 200+ level psychology course
- Select 3 additional courses in psychology at the 300 or higher level. (9 cr.)

Total (15 cr.)

Minor in Neuroscience

Requirements

Students who elect to minor in neuroscience must complete the following

- PSY-P 103 (3 cr.)
- BIOL-L 101 with lab (4 cr.)
- Choose three advanced Neuroscience courses from the following (9 cr.):
 - PSY-P 326, PSY-P 329, PSY-P 469, PSY-P 388(approved topics), PSY-P 486, PSY-P 407, BIOL-Z 446, BIOL-L 318, PHSL-P 417

Total (16 cr.)

Sociology and Anthropology

Phone: (219) 980-6789

Website: http://www.northwest.iu.edu/sociology-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. 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 (Iota of Indiana Chapter). Students are selected on the basis of excellence in research.

Learning Outcomes

- 1. Develop a depth of content knowledge,
- 2. Practice sociological interpretation,
- 3. Appreciate and understand diversity in culture and belief.
- 4. Think critically,
- 5. Employ research and analysis methods, and
- Communicate concepts and ideas with precision and clarity.

Major in Sociology Requirements - Majors (30 cr.)

- SOC S161 (3 cr.)
- SOC S230 (3 cr.)
- SOC S261 (3 cr.)
- SOC S262 (3 cr.)
- SOC S340 (3 cr.) capstone requirement
- Select any four additional sociology courses to include (12 cr.) at the 300-400 level
- Select any one additional sociology course (3 cr.)

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

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 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.)
 - SOC S413 Gender Inequality (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.)
 - SOC S376 Feminist Political Action (3 cr.)
- SOC S340 (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 S376 (3 cr.)
 - SOC S420 (3 cr.)
 - SOC S413 (3 cr.)
 - SOC S310 (3 cr.)
 - SOC S410 (3 cr.) when topic is women or gender
 - 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.)

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 requirement for the regular B.A. in Sociology and College of Arts and Sciences B.A. general requirements.
- P432 / W400 Women and Madness (3 cr.)

TSAP in Sociology - B.A.

Completion of an eligible AS or AA degree at Ivy Tech or Vincennes may put you on a Single Articulation Pathway to a BA or BS at IU Northwest, without a loss oc credit hours.

For more information on the TSAP in Sociology see <u>Single Articulation Pathways - Indiana University Northwest</u>.

Minor in Sociology

Requirements - Minor (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.)
- Select any additional sociology course (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 linguistic anthropology, it 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.

Learning Outcomes

Students majoring in anthropology will be able to:

- Describe how evolutionary and historical processes have shaped primates and human ancestors and lead to the biological, behavioral, and cultural diversity seen in the present.
- Describe how cultural systems construct reality differently for various human groups.
- Describe how varying types of data are collected, analyzed, synthesized and interpreted to achieve these first two goals.
- Communicate anthropological knowledge effectively through written, oral and data presentation in varying formats for diverse audiences.
- Discuss human diversity and how knowledge about human diversity should lead to a better understanding of and therefore respect for people whose culture differs from ours.

Major in Anthropology Requirements - Majors (33 cr.)

- ANTH A104 (3 cr.)
- ANTH A105 (3 cr.)
- ANTH A201 (3 cr.)
- Select 1 of the following Research Methods Courses
 - ANTH E404 Field Methods in Ethnography (3 cr.)
 - ANTH E423 Life Histories (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 at or above the 300-level (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 any two 300- or 400- level courses (6 cr.)
- Select any one more 3 cr. Anthropology course

Courses

- Anthropology
- Sociology

Women's and Gender Studies

Phone: (219) 980-6714

Website: http://www.northwest.iu.edu/women-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 and Gender 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, social work, sociology, psychology, the arts, and literature. Most of the courses in the program satisfy distribution requirements.

Minor in Women's and Gender Studies

Requirements - (15 cr.)

The Minor in Women's and Gender Studies consists of a minimum of 15 credit hours, distributed as follows: 6 credit hours of core courses and 3 credit hours from Women in Diverse Cultures, 3 credit hours from Women in the Social Sciences, and 3 credit hours from Women in the Humanities.

Core courses (6 cr.)

 Either W200 Women in American Society (3 cr.) OR W201 Women in American Culture (3 cr.) (students cannot get credit for both) W400 or W401 Topics in Women's and Gender Studies (3 cr.)

The remaining 9 credit hours should be selected from the Electives.

Electives

- Women in Diverse Cultures (3 cr.)
 - WGS-W301 Global Perspectives of Gender (3 cr.)
 - WGS-W 301 International Perspectives on Women (3 cr.)
 - AAAD-A 210 Women in the African Diaspora (3 cr.)
 - AAAD-A 406 Literature by American Women of Color (3 cr.)
 - AAAD-A 410 The Black Woman and the Afro-American Experience (3 cr.)
 - SPAN-S490 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.)
 - WGS-W 302 Issues in Women's and Gender Studies: The Afro-Caribbean Experience (3 cr.)
- Women in the Social Sciences (3 cr.)
 - WGS-W 300 Topics in Women's and Gender Studies (3 cr.)
 - WGS-W 400 Topics in Women's and Gender Studies (3 cr.)
 - WGS-W 400 Topics in Women's and Gender Studies: Feminist Political Action (3 cr.)
 - WGS-W 400 Topics in Women's and Gender Studies: Gender Inequality (3 cr.)
 - WGS-W 400 Topics in Women's and Gender Studies: Women and Crime (3 cr.)
 - WGS-W 400 Topics in Women's and Gender Studies: Gender and Corrections (3 cr.)
 - WGS-W 480 Women's and Gender Studies Practicum (3 cr.)
 - AAAD-A 210 Women in the African Diaspora (3 cr.)
 - AAAD-A 410 The Black Woman and the Afro-American Experience (3 cr.)
 - SPAN-S 490 Topic: The Latino Woman (3 cr.)
 - SPAN-S 470 Women in Hispanic Literature (3 cr.)
 - SOC-S 310 The Sociology of Women in America (3 cr.)
 - SOC-S 337 Women and Crime (3 cr.)
 - SOC-S 376 Feminist Political Action (3 cr.)
 - SOC-S 410 Topics in Organization: Women and Work (3 cr.)
 - SOC-S 413 Gender Inequality (3 cr.)
 - SPCH-S 450 Gender and Communication (3 cr.)
 - SPCH-S 427 Cross-cultural Communication (3 cr.)
 - SPEA-V 450/V 550 Inside Out Prison Exchange Offender Re-entry (3 cr.) (when topic is women or gender)

- WGS-W400 Topics in Women's and Gender Studies: Gender Inequality
- WGS-W400 Topics in Women's and Gender Studies: Feminist Political Action (SOC 431)
- Women in the Humanities (3 cr.)
 - WGS-W 207 Women in Literature (3 cr.)
 - WGS-W 302 Issues in Women's and Gender Studies: Afro-Caribbean Experience (3 cr.)
 - WGS-W302 Issues in Women's and Gender Studies: Women in Literature (3 cr.)
 - WGS-W302 Issues in Women's and Gender Studies: Women in American Politics (3 cr.)
 - WGS-W302 Issues in Women's and Gender Studies: Gender, Myth and Movies (3 cr.)
 - WGS-W 302 Issues in Women's and Gender Studies: Gender in French Cinema (3 cr.)
 - WGS-W 401 Issues in Women's and Gender Studies: Literature by Women of Color (3 cr.)
 - WGS-W 401 Issues in Women's and Gender Studies: Modern American Women (3 cr.)
 - WGS-W 302 Issues in Women's and Gender Studies: Women's Human Rights (3 cr.)
 - CMLT-C 340 Women in World Literature (3 cr.)
 - ENG-L 207 Women in Literature (3 cr.)
 - ENG-L 249 Gender and Sexuality in Literature (3 cr.)
 - ENG-L 381 Recent Writing (3 cr.) (When topic is women/gender)
 - ENG-L 440 Seminar in English and America Literature (3 cr.) (When topic is women/gender)
 - SPAN-S 470 Women in Hispanic Literature (3 cr.)
 - HIST-B 305 History of the Sexual Revolution (3 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.

Additionally there is another minor offered in English with a concentration in WGS. More information about it can be found https://www.northwest.iu.edu/english/degrees/minors-in-english.htm.

Undergraduate 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.)
 - W200 or W201 (3 cr.)
 - W480 (3 cr.)
- Select courses across 3 categories (12 cr.)
 - Women in Diverse Cultures
 - · Women in the Social Sciences
 - · Women in the Humanities
- 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 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 the sociology of women and gender issues.

Requirements - (30 cr.)

- SOC S161
- 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 or gender, such as Women and Deviance)
 - SOC-S 413 Gender Inequality
- · 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 and gender, such as Women and Religion)
 - SOC-S 376 Feminist Political Action
- · Select one Theory course from the following
 - SOC-S 340
- 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 S376
 - SOC S420
 - SOC S310
 - SOC S410
 - SOC S413

- SOC S431
- and / or any of S495 Individual Readings and Research when topic is women or gender
- S398 Internship in Behavioral Sciences, when agency serves women, such as shelters for battered persons, women's transitional houses, etc.

Total (30 cr.)

Outside Electives

- WGS-W 200 Introduction to Women's and Gender Studies
- Select one WGS-W 400 course such as
 - SPCH-S 450 Gender and Communication
 - AFRO-A 410 The Black Woman and the Afro-American Experience
 - 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.

General Studies Program

Administrative Officers

Mark Hoyert, Ph.D., *Dean*Jonathyne Briggs, Ph.D., *Associate Dean*Kathy Spicer, M.A., *Academic Advisor*

General

The Bachelor of General Studies (BGS) is a liberal arts degree without a specific major. It provides students with a broadly-based, multidisciplinary education while emphasizing the liberal arts and sciences. Students are required to complete three Major Areas of Learning, an Area of Concentration, and both Arts and Sciences and general electives. The program allows the student the option to utilize professional and technical courses as electives. The student takes an active role in customizing a Plan of Study that will form the basis for achieving personal and career goals.

The B.G.S. degree consist of two parts: (1) course work that must be done in broad categories, called "required areas of learning," and (2) course work that can be done in any school, division, or program of the university, called "elective credit." The three required areas of learning are arts and humanities, science and mathematics, and social and behavioral sciences. They provide students with a broad exposure to the humanities and the sciences. Electives permit students to explore other areas of interest and to tailor the degree to their individual needs.

Learning Outcomes

- Gain foundational knowledge across the humanities, social and behavioral sciences, and physical and life sciences.
- 2. Build critical thinking skills.

- Learn how to synthesize, process, and analyze information.
- 4. Write effectively at college-graduate level
- 5. Speak effectively at college graduate level

Admission

General Admission Requirements

The general studies degree programs are open to all qualified high school graduates or individuals with the appropriate General Educational Development (GED) certificate.

For information how to apply for any of the programs in General Studies please contact the Office of Admissions.

Academic Standards

Course requirements:

- Minimum of 120 credit hours and overall Indiana University grade point average of 2.0 is required for graduation
- Minimum of 30 Indiana University credit hours
- Minimum or 20 credits hours residency, after admission to the General Studies program, with a GPA of 2.0
- Maximum of 21 credit hours in a single Arts & Science subject area and 30 credit hours in a professional school
- Minimum of 30 credit hours of upper level (300/400) courses
- Minimum grade of C- in Major Areas of Learning and Area of Concentration
- · Competencies to include the following
 - ENG W131 Elementary Composition
 - SPCH S121 Public Speaking
 - GNST G203 Introduction to General Studies
 - Intensive writing (2 Intensive Writing courses needed)
 - MATH M100 or higher (including M111 & T101)
 - Computer science
 - · Science course with a lab
 - Diversity class
 - GNST G408 General Studies Capstone

Awards and Distinctions

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 on the basis of high scholarship and good character.

Graduation with Distinction

The General Studies Program recognizes outstanding performance in coursework by awarding degree with three levels of distinction. In order to graduate with distinction, students must have 60 graded IU credit hours.

The levels of distinction, which are printed on the IU diploma, are determined by the following grade point averages:

- 3.50-3.74 distinction
- 3.75-3.89 high distinction
- 3.90-4.00 highest distinction

Required Areas of Learning

Areas

- · Arts and Humanities
- Capstone Experience
- Electives
- Science and Mathematics
- Social and Behavioral Sciences

The subject fields grouped under the three areas of learning follow. Similar subject fields from other colleges and universities may be applied toward fulfilling the area requirements.

Science and Mathematics

- · Anatomy and physiology
- Astronomy
- Biology
- Biochemistry
- Chemistry
- Computer Science
- Environmental Science
- Geography
- Geology
- Informatics
- Mathematics
- Microbiology
- Neuroscience
- Physics

Other disciplines may qualify to fulfill the areas of learning and concentration. Please check with a General Studies advisor.

Arts and Humanities

- English
- Fine arts
- History
- Foreign language courses
- · Minority studies
- Philosophy
- · Religious studies
- · Speech and communication
- Theatre and drama

Other disciplines may qualify to fulfill the areas of learning and concentration. Please check with a General Studies advisor.

Social and Behavioral Sciences

- Anthropology
- Economics
- Geography
- · Minority Studies
- · Political science

- Psychology
- Sociology
- · Speech and communication
- · Sustainability Studies

Other disciplines may qualify to fulfill the areas of learning and concentration. Please check with a General Studies advisor.

Electives

Students may select any of the courses offered by Indiana University or other schools to fulfill elective requirements. Students are encouraged to consult with their advisors and to concentrate their elective course work in subject fields related to their primary academic interest, a second area of expertise, and personal interests. Students are also encouraged to focus their learning by selecting up to three minors available from the College of Arts and Sciences, the School of Business and Economics, the College of Health and Human Services, and the School of Public and Environmental Affairs.

Capstone Experience

The General Studies Degree Program requires course work leading to a capstone experience. Completing a capstone experience enables you to demonstrate accomplishments in undergraduate education. It allows you to apply both academic and real-world experiences to the principles of undergraduate learning, thereby enabling you to understand the educational philosophy of a multidisciplinary education. Contact your general studies advisor for details.

Degree Requirements

Students in the General Studies program can obtain a bachelor degree, a second bachelor degree or a cetificate (30 credit hour) degree. Requirements for all three are given below.

Bachelor of General Studies (B.G.S.) Requirements

Major Areas of Learning

- Arts & Humanities (12 credit hours in at least 2 disciplines)
- Science & Math (12 credit hours in at least 2 disciplines)
- Social & Behavioral Sciences (12 credit hours in at least 2 disciplines)
- Area of Concentration

Students must select one of the three major areas of learning (Arts & Humanities, Science & Math or Social & Behavioral) and take an additional 18 credit hours in at least 2 disciplines

Electives

66 credit hours total (with a minimum of 15 credit hours in the Arts & Sciences)

Total (120 cr.)

Other Requirements

Students must meet the 120 credit hour graduation requirement of the B.G.S. degree by satisfying the following:

- 1. At least 69 credit hours of course work in the arts and sciences must be completed. No more than 21 of these credits may be taken in a single Arts and Sciences department or subject area.
- 2. No more than 30 of 51 credit hours allowed for course work outside the arts and sciences may be taken in any one school or technical program. (No more than 27 credit hours from the School of Business and Economics)
- 3. At least 30 credit hours of course work of the required 120 credits must be taken within the Indiana University campuses.
- 4. At least 20 credit hours of course work applied to the B.G.S. degree must be taken after the student is admitted to the General Studies Degree Program. These should be IU credit hours.
- 5. At least 30 credit hours of the required 120 credit hours must be taken at the upper-division level. Upper-division course work is numbered in the 300s and 400s.
- 6. In order to apply courses to the required areas of learning, a grade of C- or higher must be achieved in IU courses.
- 7. In order to graduate, a student must have a General Studies Degree Program and Indiana University grade point average of at least 2.0.

Bachelor of General Studies (ONLINE)

The Online Bachelor of General Studies provides a multidisciplinary course of study that fulfills traditional university requirements in liberal arts and sciences while enabling you to meet your specific goals. It is a fully accredited, broad-based liberal arts degree without a specific major.

As a student in the program, you must complete requirements in three learning areas: arts and humanities, science and mathematics, and social and behavioral sciences. In consultation with your academic advisor, you also complete electives that allow you to tailor your general studies degree to your individual needs. You receive a broad range of skills and knowledge that can further your current career and/or prepare you for professional programs or graduate school. To graduate with the Online BGS degree, you must complete the same requirements as those for the on-campus BGS degree.

Degree Requirements

To graduate with the BGS, you must complete a total of 120 credit hours.

Requirements are broken down as follows:

- Arts and Humanities (minimum 12 credit hours)
- Math and Science (minimum 12 credit hours)
- Social/Behavioral Science (minimum 12 credit hours)
- Concentration (minimum of 18 additional credit hours in one of the preceding areas)

 Electives (minimum of 15 credits in Arts and Sciences and 51 credits of general electives

You must demonstrate competency by taking classes in English composition, two intensive writing courses, speech, mathematics, computer science, a science with a lab, a diversity course, and a General Studies capstone. At least 30 credit hours must be taken at the 300-400 level. You may earn up to three minors in such fields as biology, sociology, business administration, and health system administration.

The General Studies Degree Program allows credit to be awarded through independent study, distance learning, credit-by-examination, self-acquired competency (credit by portfolio), and American Council on Education (ACE) recommended programs through the military. Through these features, the program provides the convenience, flexibility and individualized learning experience that will allow the student to complete their degree requirements.

Requirements for a 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, a student may be admitted to candidacy for the B.G.S. degree.

After admission to the General Studies Degree Program, bachelor's degree candidates must earn

- At least 30 credit hours of the required 120 from Indiana University if they have not previously earned credit from the Indiana University system
- A minimum of 20 credit hours acceptable for the B.G.S. degree after admission to the General Studies Degree Program
- All requirements for the Bachelor of General Studies degree

Recognition of Previously Earned Credit

Many students in the General Studies Degree Program have previously earned academic credit at Indiana University or at other institutions. They may also apply other forms of credit, including test credit, military credit, and credit for prior learning (CPL).

Credits from Indiana University

Please see the BGS academic advisor for details on credit by examination.

Credits Eligible for Transfer from Institutions Other than Indiana University

A maximum of 90 credit hours at a four-year institution, other than Indiana University, can be applied to the B.G.S. degree, provided that grades are at least C. In order for transfer credit to be applied to any of the required areas of learning, courses taken must be equivalent in nature to those offered by Indiana University in these areas. Courses taken at another institution in which the student received the grade of C— or below will not be transferable for credit. In addition, there is a 64 credit hour

maximum for courses applied toward the B.G.S. degree from community and junior colleges.

Students who have been dismissed from another postsecondary institution cannot be admitted to the General Studies Degree Program until at least one calendar year has passed since the date of dismissal.

University regulations require that the admissions office indicate on the credit transfer report any deficiencies in grade point average (grade point average below 2.0 on a 4.0 scale) at another institution.

Credit by Examination at Other Institutions

If the transcript indicates credit by examination, and if students do not enroll in sequential courses to validate their knowledge in the subject matter, credit will be granted only on the basis of review by the appropriate academic department of Indiana University.

Military Service and Law Enforcement Credit

Veterans of military service and military and law enforcement personnel on active duty are eligible for academic credit as a result of their training and experience. The General Studies Degree Program follows the provisions of the American Council on Education's *Guide to Evaluation of Educational Experiences in the Armed Services* in granting credit. Copies of official discharge, separation papers, certificates of completion (in-service schools), or transcripts must be submitted as a basis for granting credit. Consult the BGS advisor for details.

Bachelor of Applied Science

The Bachelor of Applied Science (BAS) is an interdisciplinary degree designed for students who have completed an Associate of Applied Science (AAS) degree and who would benefit from a Bachelor's degree for career or personal advancement. The BAS gives students the unique opportunity to apply sixty of their technical AAS credits to an Indiana University bachelor's degree. Since the credits accumulated in these types of programs do not readily transfer to traditional baccalaureate programs, the BAS degree was designed to provide students with an opportunity to advance their professional skills. The BAS is a very flexible degree. Every student could design his or her own program of study. Students will work closely with an academic advisor to select a set of classes that best fits his or her individual needs. Not only can students build a unique curriculum that aligns with his or her educational and career goals, but students can complete the degree while taking only classes on campus, taking only classes offered online, or any combination of the above. The BAS degree is a joint degree program by all five IU-managed regional campuses. The joint degree format permits the campuses to share faculty resources and thereby provide educational opportunities to students in their regions that those students might not otherwise have. Students may take BAS courses from any of the five campuses and have those courses apply to their BAS degree at their home campus.

BAS Degree Requirements

 The curriculum consists of 120 credit hours. 60 of those are transferred in from an accredited community college.

- 18 credits from required core competencies
- At least 12 credits in one of four tracks: Health Care Management, Informatics, Sustainability, or an Individualized Tract
- 30 credit hours of additional electives and/or general education
- Further, students may complete on-line courses from other Indiana University campuses as part of the program.

To graduate with the BAS, you must complete a total of 120 credit hours. You may apply 60 to 64 credit hours from your AAS to Indiana University. You then complete 56-60 credit hours of courses from IU, with at least 30 credit hours at the 300- and 400-level.

Students must take one course for each learning outcome (6 courses/18 credit hours total). Students may use any listed course to satisfy this requirement.

I. Core Competencies (18 cr)

Core Learning Outcome 1: Demonstrate knowledge and skills in accounting and bookkeeping (3 cr)

Complete one of the following classes:

- BUS A200 Foundations of Accounting
- BUS A201 Introduction to Financial Accounting
- BUS A202 Introduction to Managerial Accounting

Core Learning Outcome 2: Demonstrate knowledge and skills in economics

Complete one of the following classes:

- ECON E200 Fundamentals of Economics: An Overview*
- ECON E103 or ECON E201 Introduction to Microeconomics*
- ECON E104 or ECON E202 Introduction to Macroeconomics*
- *ECON-E201 & E202 have a pre-req of MATH-M117 or MATH-M105.
- ECON-E103 and E104 do not have any pre-regs
- BUS G300 Intro to Managerial Economics and Strategy**
- **(P: MATH-M 118, ECON-E270, E103, E104, BUS-P301)
- POLS Y359 Economics and Public Management

Core Learning Outcome 3: Demonstrate knowledge and skills in legal, ethical, social, and/or international topics (must be at 300 or 400 level)

Complete one of the following classes:

- BUS B399 or BUS J404 Business and Society
- BUS D300 International Business Administration
- BUS D301 The International Business Environment(P: ECON-E300 or E201 & E202)
- POLS Y379 Ethics and Public Policy
- POLS Y380 Ethics for Public Organizations
- POLS Y403 Legal Issues in Public Bureaucracy
- PHIL P306 Business Ethics

 PHIL P393 Biomedical Ethics(P: ECON-E300 or E201 & E202)

- · HIST B391 Themes in World History
- HIST G369 Modern Japan
- HIST G385 Modern China
- HIST G387 Contemporary China
- HIST G410 China Japan US, 20th & 21st Century

Core Learning Outcome 4: Demonstrate knowledge and skills in supervision (must be at 300 or 400 level)

Complete one of the following classes:

- BUS Z300 or BUS Z301 Organizational Behavior & Leadership
- BUS Z302 (P: PSY-P103 & SOC-S100) Managing and Behavior in Organizations
- BUS W301 Management & Organization Theory
- POLS Y358 Human Behavior and Public Organizations
- POLS Y357 Public Personnel Management
- BUS Z440 Personnel Human Resource Management

Core Learning Outcome 5: Demonstrate knowledge and skills in marketing (must be at 300 or 400 level)

Complete one of the following classes:

- · BUS M300 Introduction to Marketing
- BUS M301 Introduction to Marketing Management (P: BUS-A 202, ECON-E 201 & E 202)

Core Learning Outcome 6: Demonstrate knowledge and skills in communication (must be at 300 or 400 level)

Complete one of the following classes:

- SPCH S427 or CMCL C427 Cross Cultural Communication
- SPCH C380 or SPCH S440 or CMCL C440 Organizational Communication

II. BAS Tracks (12 cr)

As a BAS student, you must choose from one of four tracks: healthcare management, sustainability studies, informatics and individualized.

You take courses related to the track you choose. These include a capstone course that helps you integrate what you have learned.

A. Health Management Track

Learning Outcome 1: Compare and contrast the U.S. health-care system, including reimbursement, with other systems around the world.

Complete one of the following classes:

- PAHM H320 or SPEA H320 Health Systems Administration
- SPEA V450 Medical Ethics
- HSCI H415 Global Child and Adolescent Health
- PAHM B311 Systems of Health Care Delivery
- PAHM B320 Global Systems of Health Care Delivery
- · BUS H320 Systems of Health Care Delivery

Learning Outcome 2: Demonstrate an understanding of the ethical, legal, financial, and political factors that influence the provision of health services in the U.S.

Complete one of the following courses:

- SPEA H452 Health Disparities
- PAHM H441 or SPEA H441 Legal Aspects of Health Care
- PAHM W314 Ethics for Health Professionals
- PAHM H474 Health Administration and Policy
- BUS H411 Management of Long-Term Care Facilities
- BUS H402 Hospital Organization and Management
- BUS H352 Health Care Financial Management

Learning Outcome 3: Evaluate access to and cost of US health care, including reimbursement practices, for different types of care.

Complete one of the following classes:

- PAHM-H315 Consume Health
- PAHM H354 or AHSC-H350 or BUS H354 Economics of Health Care
- PAHM H352 Health Finance and Budgeting

Learning Outcome 4: Effectively assess and implement improvements in clinical care, customer service, and human resource planning in a health care setting.

Complete one of the following:

- SPEA H322 Principles of Epidemiology
- PAHM H371 or SPEA H371 or HR Management in Health Care Facilities
- SPEA H402 Hospital Administration
- AHLT M366 Leadership for Health Professionals
- PAHM H401 Strategic Planning for Health Care Organizations

Capstone Outcome: Integrate knowledge and skills and apply to health management issues or challenges.

Complete one of the following:

- PAHM-B499 Health Management Capstone
- SPEA H474 Health Capstone

B. Sustainability Track

Track 1: Required

SUST-C301 Foundations of Sustainability

Track 2: Choose Two

- GEOG-G 315 Environmental Conservation (online)
- GEOG-G 338 Geographic Information Systems (online)
- GEOL-G 476 Climate Change Science (online)
- GEOL-G 478 Global Change, Food, & Farming Systems
- SUST-S 400 Energy: Sources and Needs (online)
- POLS-Y 308 Urban Politics (online)
- POLS-Y 346 Politics of the Developing World (online)
- SOC-S 308 Global Society (online)
- SOC-S419 Social Movements and Collective Action

- SUST-C340 Sustainability in the Social and Behavioral Sciences
- SUST-C350 Sustainability in the Arts and Humanities

Track 3: Required, Capstone

SUST-C490 Capstone in Sustainability

C. Individualized Track

The student, in close consultation with an advisor, selects 12 hours of 300- and 400-level courses to complete this track.

- COAS-S4OO Workshop in Special Topics
- BAS Individualized Capstone is also required.

D. Informatics Track

The Informatics track may appeal if you hold an Associate of Applied Science in Computing or an Associate of Applied Science in Information Technology. INFO-C100

- INFO-C112
- INFO-C210
- INFO-C211
- INFO-C300
- INFO-C413

Graduate

Administrative Officers

Mark Hoyert, Ph.D., Dean College of Arts and Sciences David Klamen, M.F.A., Dean School of the Arts

Jonathyne Briggs, Ph.D., Associate Dean Kristin Huyksen, Ph.D., Associate Dean

Mary Hackett, Director of Finance and Planning

Sherri Sosh, Courses and Contracts Manager

Bhaskara Kopparty Rao, Ph.D., Chair, CIS Patrick Johnson, Ph.D., Coordinator, Communication Dan Kelly, Ph.D., Chair, Chemistry

Brian O'Camb, Ph.D., Chair, English Scooter Pegram, Ph.D., Director, MLS and Chair Modern Languages

Axel Schulze-Halberg, Ph.D., Chair, Mathematics Harold Olivey, Ph.D., Chair, Biology Gianluca Di Muzio, Ph.D., Chair, History, Political Science and Philosophy

Website: www.northwest.iu.edu/coas/

Phone: (219) 980-6789

Overview

The College of Arts and Sciences offers multiple Masters degree programs.

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.

Master of Science in Computer Information Systems

The Master of Science in Computer Information Systems program is designed for students who desire to advance their careers in information technology. The Master of Science (MS) in Computer Information Systems (CIS) consists of 30 credit hours. A project/internship component of 3 credit hours is part of the core requirements. Students will complete all the core requirements of 18 credit hours and choose 12 credit hours of electives offered based on faculty expertise and market demands. A full-time student could complete the Master's degree in two years.

Master of Arts in English

This 100 percent online, consortial program is taught by IU Bloomington, IUPUI, IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Master of Arts in English provides broad training in the primary areas of English studies. As a student in the program, you explore the core principles of writing and literature pedagogy, the linguistic structure and history of English literature, and a wide variety of reading strategies associated with genre and close reading. You gain skills and knowledge to conduct archival research, develop analytical and presentation skills through the focused study of literature in a seminar format, and acquire an appreciation of current trends in the field of digital humanities.

Master of Arts in History

This 100-percent online program is taught by IU East, IU Bloomington, IUPUI, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

By studying the past, we are better able to understand and communicate the importance of issues in our contemporary world. The IU Online Master of Arts in History explores geographic regions of the world in both modern and pre-modern time periods to identify historical actors, events of significance, and social movements. Gain graduate-level historical knowledge, critical thinking skills, and techniques for clear and persuasive writing.

Learn to recognize historiographic trends and their meanings, perform research, and construct original historical arguments. Your studies will culminate in at least one semester-long research project of original scholarship.

Master of Arts in Political Science

This 100 percent online program is taught by IU East, IU Bloomington, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Master of Arts in Political Science offers instruction in the approaches and methods political scientists use to analyze and explain political institutions and behavior.

Read, interpret, and evaluate literature in the political science discipline. Study the role of political science within the social sciences, the various methods used to build a body of knowledge, and the application of this knowledge to the political environment around you. Trace the influence of major theories and themes in political thought, and conduct empirical social science research.

Tailor your degree to your professional interests by choosing one of two tracks: World politic or American politics.

Master of Arts in Teaching- Biology

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IUPUI, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Master of Arts for Teachers in Biology combines coursework in education and biology to prepare you to be a dual-credit instructor at the high school and community college levels. The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

Master of Arts in Teaching - Chemistry

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IU Kokomo, IU Northwest, and IU Southeast.

The IU Online Master of Arts for Teachers in Chemistry combines coursework in education and chemistry to prepare you to be a dual-credit instructor at the high school and community college levels. The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

Master of Arts in Teaching - French

This 100 percent online program is taught by IU Bloomington, IU East, IUPUI, IU Northwest, and IU Southeast.

The IU Online Master of Arts for Teachers in French combines coursework in education and French to prepare you to be a dual-credit instructor at the high school and community college levels. Deepen your proficiency in French through advanced graduate coursework and gain a comprehensive understanding of Francophone cultures and of French as a living language. Study and practice

various language teaching methodologies, thereby improving your instructional skills and your students' learning outcomes.

Master of Arts in Teaching - History

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IUPUI, IU Kokomo, IU Northwest, IU South Bend. and IU Southeast.

The IU Online Master of Arts for Teachers in History combines coursework in education and history to prepare you to be a dual-credit instructor at the high school and community college levels. The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

Master of Arts in Teaching - Mathematics

This 100 percent online program is taught by IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Master of Arts for Teachers in Mathematics combines coursework in education and mathematics to prepare you to be a dual-credit instructor at the high school and community college levels. The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

Master of Arts in Teaching - Political Science

This 100 percent online, consortial program is taught by IU Bloomington, IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Master of Arts for Teachers in Political Science combines coursework in education and political science to prepare you to be a dual-credit instructor at the high school and community college levels. The educational component of the program teaches you how to apply the science and art of teaching to college-level instruction. Coursework covers instruction and curriculum, assessment, diversity and inclusive teaching, and research.

Graduate Certificates

Graduate certificates are available online in Biology, Chemistry, Communication Studies, Political Science, History, Spanish, Literature, Language and Literature and Mathematics. These 18 cr. certificates are designed for those who want to teach dual-credit courses and who need to meet Higher Learning Commission dual-credit qualification standards. These standards require teachers wanting to teach dual-credit courses to hold either a master's degree in their area of instruction or a master's degree in another discipline (such as education), plus at least 18 credit hours of discipline-specific graduate coursework.

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 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.

Learning Outcomes

Upon graduation, all MLS graduates from IU Northwest should be able to:

- Write at an advanced level, both professionally and academically in the discipline of their focused studies, as well as in general (which is a skill that they can use in their career)
- Have the capacity and ability to engage with their professional and scholarly peers and to present new ideas. This includes having the advanced ability to contribute new ideas and to connect with their peers and others in their classes and community.
- Deconstruct various theories and practices in order to create and answer critical questions based on a variety of different subjects in the Humanities or Sciences.
- Demonstrate ethical and effective oral and written communication, appropriate to chosen audience and context.
- Demonstrate all aspects of critical inquiries (both written and visual) that are concentrated on the historical, theoretical, and critical issues/subjects that pertain to the student's chosen disciplines of study in the liberal arts.
- Become advanced critical thinkers. This means, graduates will be able to Identify, analyze, and evaluate important subjects and topics of their community and our world because of the various experiences and perspectives they obtained through the foundational disciplinary knowledge as discussed and presented in their courses.
- Become better citizens and leaders in their local community (and their career).

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.)

Independent Research / Creative Activity Option

The Independent Research/Creative Activity Option offers students the opportunity to work closely with a faculty committee and to complete a final project designed around their unique interests. Students must take 12 credits of electives and then successfully complete their program with a graduate project. The graduate project is an independent scholarly enterprise in which the student demonstrates mastery of a specific topic. Examples include a thesis, a computer program, a translation of a work of literature, or an artistic composition or performance.

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. The public intellectual coursework must be taken at IU Northwest.

Requirement

LIBS D600 Public Intellectual Practicum (3 cr.)

Master of Liberal Studies (Online)

The Master of Liberal Studies will provide graduate-level instruction in the arts and humanities, social sciences, and natural sciences in an interdisciplinary manner to students interested in obtaining advanced skills and knowledge in these areas. These students may include those interested in a multi-disciplinary approach to a thesis topic; or, they may include instructors at community colleges, and high school dual-credit and international baccalaureate teachers, among others. For those students who are teaching or plan to teach introductory post-secondary mathematics, English, or speech communication, certificate courses will help them integrate new concentration-specific concepts and approaches into their teaching, thereby improving the quality of instruction and learning outcomes for their students.

These graduate certificates that can be "stacked" with this Master's degree allow instructors of introductory college-level mathematics, English, and/or speech communications to partially meet the requirements of many post-secondary institutions for their faculty. These requirements usually include a master's degree in the discipline, or a master's degree in another field (e.g., education) plus 18 hours in the discipline. With the increased attention that the Higher Learning Commission and other accrediting bodies are giving to the issue of faculty qualifications, current faculty are seeking ways to meet the requirement.

Learning Outcomes

Upon graduation, all MLS graduates from IU Northwest should be able to:

- Write at an advanced level, both professionally and academically in the discipline of their focused studies, as well as in general (which is a skill that they can use in their career)
- Have the capacity and ability to engage with their professional and scholarly peers and to present new ideas. This includes having the advanced ability to contribute new ideas and to connect with their peers and others in their classes and community.
- Deconstruct various theories and practices in order to create and answer critical questions based on a variety of different subjects in the Humanities or Sciences.

- Demonstrate ethical and effective oral and written communication, appropriate to chosen audience and context.
- Demonstrate all aspects of critical inquiries (both written and visual) that are concentrated on the historical, theoretical, and critical issues/subjects that pertain to the student's chosen disciplines of study in the liberal arts.
- Become advanced critical thinkers. This means, graduates will be able to Identify, analyze, and evaluate important subjects and topics of their community and our world because of the various experiences and perspectives they obtained through the foundational disciplinary knowledge as discussed and presented in their courses.
- Become better citizens and leaders in their local community (and their career).

Admission Requirements

For regular admission, students must:

- Provide a transcript from an accredited institution that shows a completed undergraduate degree with a cumulative GPA of 3.0 or above. Students who do not meet this GPA standard may contact the Director of the M.L.S. program at the intended campus enrollment to discuss options for special consideration.
- · GRE scores (taken within the past five years).
- Two letters of recommendation from individuals familiar with your academic work and/or potential to succeed in graduate level coursework.
- · In-person or video Interview with the Director of the M.L.S. program at the IU campus of intended enrollment.

Applications will be accepted on a rolling basis, but to assure timely enrollment, students should apply by August 10th for the fall semester and January 2nd for the spring semester.

Applications may be obtained through the master's in liberal studies office at Crestview Hall 018B or by calling (812) 941-2604 or (812) 941-2668 or on the Web site.

Degree Requirements

To earn the Master of Liberal Studies students will need to complete 34-36 credit hours of graduate coursework and satisfy the following M.L.S. degree requirements.

1. M.L.S. Core (12-13 cr) to include:

A. LBST-D 510 Introduction to Graduate Liberal Studies (3cr), AND

COAS-Q 510 Topics in Information Literacy (1 cr) (Q510 waived for certificate students by petition)

B. LIBS/LBST D501 Humanities Seminar (3 cr)

C. LIBS/LBST D502 Social Science Seminar (3 cr)

D. LIBS/LBST D503 Science Seminar (3 cr)

*(Q510 waived for certificate students by petition)

2. M.L.S. Electives (12-20 cr)

Option A: Four to Five M.L.S. Elective courses selected from (12-15 cr)

- 1) LIBS/LBST D511 M.L.S. Humanities Elective (3 cr)
- 2) LIBS/LBST D512 M.L.S. Social Science Elective (3 cr)
- 3) LIBS/LBST D513 M.L.S. Science Elective (3 cr) Option B: Completion of an approved IU Graduate Certificate (18-20 cr)

The M.L.S. is designed to be "stackable" with IU Graduate Certificates. In practice this means students are eligible to apply the 18-20 credit hours of certificate credits towards satisfaction of the M.L.S. elective requirement. Students interested in "stacking" the M.L.S. with an IU Graduate Certificate may enter the M.L.S. after completing an IU Graduate Certificate or they can apply for admission to the M.L.S. while continuing to work towards completion of the certificate. The certificate is a stand-alone credential with separate admission procedures and will be awarded when requirements are completed independent of a student's progress in the M.L.S. An M.L.S. stacked with an IU Graduate Certificate will require a minimum of 34 graduate credits hours, including the 13 credit M.L.S. core and at least 3 credit hours earned for the M.L.S. capstone project.

- **Graduate Certificates approved to stack with the collaborative M.L.S. include:
- 1) English Composition Studies,
- 2) German,
- 3) History,
- 1) Biology
- 2) Chemistry
- 3) Communication Studies
- 4) English Composition Studies
- 5) German
- 6) History
- 7) Language and Literature
- 8) Literature
- 9) Mathematics
- 10) Political Science
- 11) Spanish

3. M.L.S. Capstone Experience/Project (3-9 cr)

Capstone Experience Options

Formal Thesis (6-9 cr). Original research or analysis encompassing literature from at least 2 different disciplinary perspectives. The thesis must be written in scholarly format, with the appropriate citation format and extensive references. The literature review developed for the thesis proposal should serve as the initial component of the thesis. Typical thesis length: 50 or more pages.

Required course sequence for Thesis:

LBST-D 601 Graduate Project Proposal Seminar or LIBS-D 601 M.L.S. Project Proposal Seminar (3 cr); and LBST-D 602/LIBS-D 602 Graduate Project or LBST-D 604 Thesis (3-6 cr).

Peer-Reviewed Publication. Students may focus their capstone project work on a peer-reviewed publication in a peer-reviewed publication in a peer-reviewed publication in a professional forum. Examples include articles in professional journals, investigative journalism published in a major newspaper, or a book published by a reputable press. The publication must be accompanied by an explanatory essay encompassing material from at least 2 different disciplinary perspectives. The essay must be written in scholarly format, with appropriate citation format and

appropriate references. The literature review developed for the thesis proposal may serve as the basis of the explanatory essay. Typical length of explanatory essay: 20 to 35 pages.

Required course sequence for Peer-Reviewed Publication: LBST-D 601 Graduate Project Proposal Seminar or LIBS-D 601 M.L.S. Project Seminar (3 cr); and

LBST-D 602/LIBS-D 602 Graduate Project (3-6 cr). **Creative Project.** Students who are focusing their M.L.S. program on a creative field may complete a creative project for their M.L.S. thesis. Creative work may include writing, art, performance, etc. The creative work must be accompanied by an explanatory essay encompassing material from at least 2 different disciplinary perspectives. The essay must be written in scholarly format, with appropriate citation format and appropriate references. The literature review developed for the thesis proposal may serve as the basis of the explanatory essay. Typical length of explanatory essay: 20 to 35 pages.

Required course sequence for Creative Project:

LBST-D 601 Graduate Project Proposal Seminar or LIBS-D 601 M.L.S. Project Proposal Seminar (3 cr); and LBST-D 602/LIBS-D 602 Graduate Project (3-6 cr).
4) Applied Project. Students may focus their research project on their current place of employment, internship, or practicum. The applied project should be designed to benefit both the student and the employer and can be focused narrowly on a specific issue or problem relevant to the employer. Complete literature review and effectively designed method will support the value of the project. Typical length: 50 or more pages.

Required course for Applied Project: LBST-D/LIBS-D 602 Graduate Project (3 cr).

5) Public Intellectual Project. The Public Intellectual option offers students the opportunity to work within a learning community made up of other students and led by a faculty facilitator to explore the variety of genre through which public intellectuals communicate, and to create their own portfolio of public intellectual work to be submitted for completion of the M.L.S. degree.

Required Course for Public Intellectual Project: LBST-D 600 Public Intellectual Practicum (3 cr).

M.S. in Computer Information Systems (CIS)

Program Description and Admission

The Master of Science in Computer Information Systems program is designed for students who desire to advance their careers in information technology. The Master of Science (MS) in Computer Information Systems (CIS) consists of 30 credit hours with a minimum grade of B- in each course and a 3.0 overall GPA. A project/ internship component of 3 credit hours is part of the core requirements. Students will complete all the core requirements of 18 credit hours and choose 12 credit hours of electives offered based on faculty expertise and market demands. The department may offer additional electives from time to time. A full-time student could complete the Master's degree in two years.

To be considered for admission to the MS in CIS program, students must hold a bachelor's degree from an accredited institution in any field. If the field of major is related to CIS, students are eligible to be admitted directly into the graduate program. If the field of major is not related to CIS, students will be admitted conditionally.

Students should have obtained an undergraduate grade point average of at least 3.0. Students with a GPA slightly below 3.0 who are returning to college with relevant work experience may be admitted if their applications contain sufficient evidence of their skills and ability to succeed in graduate work.

Graduate Record Examination (GRE) scores are not required. Applications will be reviewed on a rolling basis.

For questions, contact: Dr. Bhaskara Kopparty, Computer Information Systems Department: 219-980-6638, or come visit us: Hawthorn Hall, Room 325.

Program Objectives and Goals

The objective of this program is to prepare graduates with a sound basic understanding of computers coupled with knowledge of systems and applications in computer science. The coursework will cover advanced applications and will prepare students for employment at an advanced level.

Graduates from the MS in CIS program will be informed critical thinkers, be proficient in their chosen medium, and have advanced knowledge of computer information systems.

This Master's degree can prepare students for continued advance study, including doctoral degrees in computer science or informatics. Students with a Bachelor's degree will find the MS in CIS as a path to advanced employment in a number of IT related occupations, such as business analyst, data analyst, information security analyst, computer and information systems analyst, and project manager. Each of these occupations currently is in high demand.

The goals of this Master's degree are to develop proficiency in the practice of computing and to prepare students for professional leadership roles. Each graduate should be able to:

- · Formulate solutions to computing problems
- Analyze and compare alternative solutions to computing problems
- Design and implement effective solutions to computing problems
- Apply sound principles to the synthesis and analysis of computer systems
- Work effectively in teams to design and implement solutions to computational problems
- Communicate effectively, both orally and in writing
- Think critically and creatively, both independently and with others
- Recognize the social and ethical responsibilities of a professional working in the discipline
- Seek out, develop, and adapt to new developments in the field of computer science

Curriculum

Core Courses - 18 credit hours

- Introduction to Artificial Intelligence (CSCI B551) 3 credit hours
- Information Systems Development (CSCI P532) 3 credit hours
- System and Protocol Security & Information Assurance (INFO I533) – 3 credit hours
- Advanced Web Page Development (CSCI C605)

 3 credit hours
- Informatics Project Management (INFO B505) 3 credit hours
- Independent System Development (CSCI Y790) 3 credit hours

Elective Courses - 12 credit hours

Electives: At least half of all Elective credits must be in courses numbered 600 or above.

- Data Analysis Using R (CSCI C504) 3 credit hours
- Business Intelligence Using SAP (CSCI C603) 3 credit hours
- Predictive Analytics and Data Mining (CSCI B565) 3 credit hours
- UNIX/LINUX Administration (CSCI C606)

 3 credit hours
- Topics in Systems (CSCI B649) 3 credit hours

M.A. in English (Online)

This 100 percent online, consortial program is taught by IU Bloomington, IUPUI, IU East, IU Kokomo, IU Northwest, IU South Bend. and IU Southeast.

The IU Online Master of Arts in English provides broad training in the primary areas of English studies.

As a student in the program, you explore the core principles of writing and literature pedagogy, the linguistic structure and history of English literature, and a wide variety of reading strategies associated with genre and close reading. You gain skills and knowledge to conduct archival research, develop analytical and presentation skills through the focused study of literature in a seminar format, and acquire an appreciation of current trends in the field of digital humanities.

The MA in English has a two-part "stackable" structure.

- You first complete an online, 20 credit hour graduate certificate in literature, composition studies, or language and literature. The certificate allows you to acquire specialized knowledge.
- After you successfully complete one of the certificates, you take an additional 16 credits of master's-level coursework that extends the breadth and depth of your knowledge.

Of Special Interest for Dual-Credit and Community College Instructors Needing to Meet HLC Standards

The stackable structure of the MA in English is ideal for dual-credit and community college teachers who need to meet the Higher Learning Commission's instructor qualification standards. These standards require teachers to hold either a master's degree in their area of instruction or a master's degree in another discipline plus at least 18 credit hours of discipline-specific graduate coursework.

- If you hold a master's degree in a discipline other than your discipline of instruction, you can meet HLC's standards by completing one of the online certificates.
- If you need both discipline-specific coursework and a master's degree, the MA in English meets HLC standards and provides a comprehensive program of study in English.

Degree Requirements

To earn the MA in English, you must complete a total of 36 credit hours.

Requirements are broken down as follows:

- English graduate certificate (20 credit hours)
- MA core courses (8 credit hours)
- MA elective courses (8 credit hours)

For more information on the MA in English see https://online.iu.edu/program/indiana-university-online-english-master-1554222813478.

Master of Arts in Teaching (Online)

The IU Online Master of Arts for Teachers combines coursework in education and a specific discipline to prepare you to be a dual-credit instructor at the high school and community college levels.

M.A.T. in BiologyM.A.T. in ChemistryM.A.T. in FrenchM.A.T. in Computer ScienceM.A.T. in History

M.A.T. in Mathematics M.A.T. in Political Science

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.

Graduate Certificates in English (Online)

These 100 percent online, consortial graduate certificates are taught by IU Bloomington, IUPUI, IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

There are three graduate certificates in English that provide graduate-level instruction in English to students interested in obtaining advanced skills and knowledge in this discipline. For those students who are teaching or plan to teach introductory post-secondary language, writing, and literature courses in English or Dual-Credit classes, our courses will help them integrate disciplinary concepts and approaches into their teaching, thereby improving the quality of instruction and learning outcomes for their students.

Of Special Interest for Dual-Credit and Community College Instructors Needing to Meet HLC Standards

The stand-alone Certificate in Composition Studies provides the requisite number of discipline-specific graduate credits for those who already hold a master's degree. Students who need both the discipline-specific coursework and a master's degree may take the additional

required English graduate classes to earn a master's in English.

Students may complete the requirements for a Graduate Certificate in English in one of three competency areas.

Online Graduate Certificate in Literature

Students must take one course in each of the numbered requirements.

- 1. ENG L503—Teaching Literature in College.
- 2. ENG L553—Studies in Literature.
- 3. ENG D600—History of the English Language.
- 4. ENG L500/600—Literature Elective.
- 5. ENG L500/600—Literature Elective.

Electives may be repeated for credit so long as they are on a different topic.

Online Graduate Certificate in Language and Literature

Students must take one course for each of the numbered requirements.

- ENG W509—Introduction to Writing and Literary Studies or ENG W500— Issues in Teaching Writing and Literature.
- 2. ENG L503—Teaching Literature in College.
- 3. ENG D600—History of the English Language.
- ENG W600—Topics in Rhetoric or Composition or ENG W682—Special Topics: Rhetoric and Composition or ENG W508—Creative Writing for Teachers.
- 5. ENG L500/600—Literature Elective.

Online Graduate Certificate in Composition Studies

Students must take one course for each of the numbered requirements.

- ENG W509—Introduction to Writing and Literary Studies or ENG W500— Issues in Teaching Writing and Literature.
- ENG G660—Stylistics.
- ENG W590—Teaching Writing: Theories and Applications or ENG W620—Advanced Argumentative Writing.
- ENG W501—Teaching College Writing or ENG W600—Topics in Rhetoric and Composition.
- 5. ENG W682—Capstone course.

For more information on the Graduate Certificates in English see:

https://online.iu.edu/degrees/composition-studies-graduate.htmlhttps://online.iu.edu/degrees/language-and-literature-certificate.htmlhttps://online.iu.edu/degrees/literature-certificate.html

Graduate Certificate in Communication Studies (Online)

The graduate certificate in Communication Studies is taught consortially by IUPUI, IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast.

The IU Online Graduate Certificate in Communication Studies provides graduate-level instruction in communication strategies, practices, and techniques. It teaches practical communication skills needed in professional, academic, and personal contexts, such as presenting information, arguing a position, promoting a cause, presenting information via social media, designing targeted messages, and managing relations and conflicts.

Of Special Interest for Dual-Credit and Community College Instructors

In addition to providing a program of study in communication studies at the graduate level, the IU Online Graduate Certificate in Communication Studies meets the Higher Learning Commissions (HLCs) instructor qualification standards, which require instructors to hold a master's degree in their area of instruction or a master's degree in another discipline, plus a minimum of 18 credit hours of discipline-specific graduate coursework.

This stand-alone certificate provides the HLCs requisite number of discipline-specific graduate credits for those who already hold a master's degree.

Your IU Online Graduate Certificate in Communication Studies prepares you for such careers as:

- Communication dual-credit teacher (high school)
- Communication instructor (community college)
- Communication professional in an organization or institution

Certificate Requirements

To earn the Graduate Certificate in Communication Studies, you must complete 18 credit hours.

Requirements are broken down as follows:

- Communication pedagogy course (3 cr. hours)
- Communication in context courses (9 cr. hours)
- Communication in media course (3 cr. hours)
- Communication elective course (3 cr. hours)

For more information on the Graduate Certificate in Communication Studies see https://online.iu.edu/degrees/communication-studies-graduate-certificate.html.

Graduate Certificate in Computer Science (ONLINE)

The graduate certificate in Computer Sciene is taught consortially.

This six-course curriculum is designed to promote excellence in computer instruction to help dual credit instructors meet their professional goals, and in turn, to improve the learning outcomes and classroom experiences of their beginning Computer Science students. The six-courses required for the Graduate Certificate in Computer Science are identical to the computer science component in M.A.T. in Computer Science. Certificate students can stack their computer science coursework into the M.A.T. should they opt to pursue the master's degree.

Requirements

To earn the IU collaborative Graduate Certificate in Computer Science students much complete the following six courses:

Computer Science Component (18 credit hours)

CSCI-T 500 CS Foundations

- CSCI-T 510 Introduction to Computing and Programming
- CSCI-T 520 Introduction to Software Systems
- INFO-T 530 Introduction to Informatics
- CSCI-T 540 Introduction to Data Science
- CSCI-T 550 Introduction to Cybersecurity

Graduate Certificate in Mathematics (Online)

This 100 percent online program is taught by IU East, IU Kokomo, IU Northwest, IU South Bend, and IU Southeast. This consortial model allows you to take coursework from multiple campuses and benefit from the expertise and experience of a diverse faculty.

The Graduate Certificate in Mathematics provides graduate-level instruction in mathematics to students interested in obtaining advanced skills and knowledge in this area.

These may include instructors of finite mathematics, calculus and other introductory college-level mathematics courses. The certificate curriculum provides the knowledge and expertise needed to integrate new mathematical concepts and approaches into teaching.

Of Special Interest for Dual-Credit and Community College Instructors

The Higher Learning Commission (HLC) requires all high school teachers who teach dual-credit or other college-level courses to hold a master's degree in the field, or to have a master's degree in another area (such as education), plus at least 18 credit hours of graduate coursework in the discipline. The Graduate Certificate in Mathematics provides these 18 discipline-specific credit hours.

Certificate Requirements

To earn the Graduate Certificate in Mathematics, you must complete 18 credit hours. Requirements are broken down as follows:

- Mathematics core courses (9 credit hours)
- Mathematics elective courses (9 credit hours)

You choose courses from the following areas of study: algebra, analysis, typology and geometry, differential equations and applications, and probability and statistics.

For more information on the Graduate Certificate in Mathematics see https://online.iu.edu/degrees/mathematics-graduate.html.

Postbaccalaureate Certificates

The College of Arts and Sciences offers postbaccalaureate certificates in three 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), 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)