This catalog is an informational guide to Ball State University. The information in this catalog is subject to change and should not be considered a contract. Catalog changes are possible for a number of reasons, including changes in certification or licensing standards for certain programs of study, or because of periodic review of academic programs, curricula, and course offerings by the university governance system. The university, through its academic advising system, will make every effort to help students adapt to changes in the catalog. However, the final responsibility for meeting academic and graduation requirements rests with each student. Students are encouraged to consult frequently with their faculty or academic advisors and to remain in regular contact with major departments in order to stay informed about possible changes in this catalog.

Ball State University is an equal opportunity/affirmative action institution in accordance with civil rights legislation and does not discriminate on the basis of race, religion, national origin, sex, age, disability, Vietnam veteran status, or any other basis of discrimination prohibited by law in any of its educational programs, activities, admission, or employment policies. Concerns regarding this policy should be referred to the Director of Affirmative Action, Administration Building, Ball State University, Muncie, Indiana 47306, 765-285-5162. The Title IX Coordinator and the 504 Coordinator may be reached at the same address.
General Information

HISTORY OF THE UNIVERSITY
Ball State University was founded as Indiana State Normal School, Eastern Division, in 1918. Its antecedents, all housed in what is now the Ball State Administration Building, were also normal schools, owned and operated under various names. In 1918, the Ball brothers, a prominent Muncie industrial family, bought the property and donated it to the state of Indiana, which, in turn, transferred control of the school to the board of trustees of the Indiana State Normal School in Terre Haute. In 1922, in recognition of the generosity of the Ball brothers, the board added Ball Teachers College to the school’s name. In 1929, the Indiana General Assembly separated the two colleges, naming the Muncie campus Ball State Teachers College.

On February 8, 1965, the general assembly renamed the institution Ball State University in recognition of its phenomenal growth in enrollment and physical facilities; the variety and quality of its educational programs and services; and in anticipation of the much broader role it would be expected to assume in the future.

DESCRIPTION OF THE UNIVERSITY
Ball State University is a comprehensive, publicly assisted institution of higher learning whose mission is to provide excellent education. It is located in Muncie, Indiana, a city of 70,000, fifty-six miles northeast of Indianapolis.

Although its primary concern is for the citizens of Indiana, it offers programs with appeal to regional, national, and international audiences.

Ball State University offers a strong undergraduate liberal and professional education and selected graduate programs of high quality. Ball State students can choose from a comprehensive range of academic programs at the associate, baccalaureate, and master’s levels, as well as doctoral programs in areas where the university has special competence.

The university has a selective admissions policy; in some areas, such as architecture, the university is very selective. Exceptionally well-qualified undergraduate students may enroll in the Honors College for more intellectually demanding programs of study. Students who have not decided on a major or who may need to strengthen their learning skills can take advantage of the special academic assistance and intensive educational advising offered by University College.

As part of Ball State’s commitment to excellence in education, the university offers students a friendly, collegial atmosphere; a full range of out-of-class activities; and excellent, well-planned academic, residential, and recreational facilities. An impressive array of student support services contributes to the personal, social, and intellectual development of all students.

Although Ball State University is primarily a residential academic community, it also supports programs that reach students well beyond the immediate campus. Through interactive telecommunications, Internet courses, and on-site courses, Ball State distance learning students are able to take courses and entire degree programs. The university has a strong commitment to cultural diversity and international programs. It offers exchange programs with universities throughout the world and a wide variety of opportunities for students to study abroad.

VISION
Ball State University will be a national model of excellence for challenging, learner-centered academic communities that advance knowledge and improve economic vitality and quality of life.

MISSION
We engage students in educational, research, and creative endeavors that empower our graduates to have fulfilling careers and meaningful lives enriched by lifelong learning and service, while we enhance the economic, environmental, and social vitality of our community, our state, and our world.

THE BENEFICENCE PLEDGE
Members of the Ball State University Community . . .

pledge to maintain high standards of scholarship and excellence
To work with students, faculty, and staff to strengthen teaching and learning on campus.

pledge to practice academic honesty
To model and uphold academic integrity, to honor their peers and earn the trust and respect from all members of the community.

pledge to act in a socially responsible way
To treat each person in the Ball State community with civility, courtesy, compassion, and dignity; to respect the property and environment of the campus.

pledge to value the intrinsic worth of every member of the community
To respect and learn from differences in people, ideas, and opinions.
Admissions

By statute, the Ball State University Board of Trustees is authorized to “prescribe the conditions for admission of students to the university, provided that graduation from a commissioned secondary school or its equivalent shall be required.” Specific admissions policies and practices are subject to change as the institution adjusts to enrollment patterns.

In order to maintain high academic standards and to ensure that students receive the best education possible at Ball State, the university limits enrollment to students meeting specific admissions requirements. In addition, the university reserves the right to determine the semester to which students are admitted based on the basis of students’ academic qualifications as well as availability of space. The university also reserves the right to limit the number of nonresident students.

To be considered for admission to Ball State, a student must have graduated or be on track to graduate from an accredited secondary school or have earned a General Education Development (GED) and/or Test Assessing Secondary Completion (TASC) and/or HiSET (High School Equivalency Test) certificate. Students who are not high school graduates may be considered for admission to the university after they have presented evidence that they have earned GED/TASC/HiSET certificates.

Both the quality and the content of secondary school academic programs are important in admission decisions. Students graduating from high school in Indiana are required to complete the academic component of the Core 40 high school curriculum. Students from other states should pursue strong college prep curricula. All students are encouraged to complete state academic honors diplomas where available. For questions related to curricula, email us at askus@bsu.edu or call the Office of Admissions at 800-482-4BSU; 765-285-8300; or TTY users only, 765-285-2205.

Applicants should obtain the most recent edition of Ball State University’s Admissions Viewbook which may be available from their high school guidance offices or from Ball State’s Office of Admissions. Interested applicants should apply online at bsu.edu/admissions/apply.

Ball State University is not responsible for problems that may arise if students fail to submit complete admissions materials, including official transcripts from other institutions. Ball State class placement and registration may be impacted if complete transcripts of course work are not received in a timely manner to evaluate. All admission materials submitted, including transcripts, become the property of Ball State University.

Note: Ball State University practices rolling admissions. Admission to a particular semester may depend on date of application and space available. When enrollment goals are met for each term, admissions will close.

Admission to the university does not guarantee admission to a particular academic program. Consult the section of this catalog that applies to the appropriate department to determine admission requirements for specific programs.

PROCEDURES FOR APPLICANTS

Students with No Previous College Experience

Students who have had no previous college experience, after high school graduation, will be considered for admission to Ball State University after the Office of Admissions has received the following:

1. An application for admission. Applicants submit a completed application for admission before March 1 for priority consideration for fall semester, before December 1 for spring semester, and before April 1 for summer semester. Applications submitted later than the priority deadlines will be considered as space is available. Applications may be submitted up to one year in advance.

Students seeking admission to academic programs in art, dance, music, theatre, or the first-year program in the College of Architecture and Planning (CAP) will be required to provide additional information within the online application to be considered for admission to those programs. Students will also be required to provide additional information within the admission application to be considered for admission to the Honors College. For information about the supplemental application process, students should contact the Office of Admissions. Students are strongly encouraged to apply early, as a limited number of students are admitted to these programs.

2. A $60 nonrefundable application fee. Applicants must pay a $60 application fee before they will be considered for admission. The fee can be paid by a credit card or electronic check process included in the online application for admission. In cases of financial difficulties or other approved reasons, a request can be made to have the application fee waived. Supporting documentation must be sent to Ball State University Office of Admissions documenting the reason for the fee waiver request on behalf of the applicant.

3. Secondary school record (official transcript) or GED/TASC/HiSET certificate. Students should ask their high schools to send official copies of the secondary transcripts to the Office of Admissions,
including lists of courses in progress. Students who have been home schooled or who have attended unaccredited high schools may be required to submit an official General Education Development (GED) and/or Test Assessing Secondary Completion (TASC) and/or High School Equivalency Test (HiSET) certificate. Transcripts or GED/TASC/HISET certificates must show that applicants meet the standards for certification as secondary school graduates. If schools send partial transcripts, students must make certain that complete official transcripts showing the specific date of graduation are submitted as soon as possible after graduation. Failure to do so will result in a registration barrier and university hold placed on the student’s record. Students who have not produced certification of high school graduation are not eligible to receive federal financial aid. If admitted, the quality of students’ academic achievement must remain the same or improve, or the admission classification may be changed or admission rescinded.

4. Standardized test scores. Ball State is a test optional institution. Applicants may elect to provide the Scholastic Assessment Test (SAT) or American College Testing Assessment (ACT) score. The test scores should be sent directly to the university. Some students 23 years old or older may also be required to take the SAT or ACT. For additional information, visit bsu.edu/admissions.

5. Dual credit/college credit. Students taking college-level courses at an accredited institution while enrolled in high school must submit official college transcript(s) to the Office of Admissions in order to receive credit for completed courses. For advanced standing information, please see Advanced Standing section (p. 9).

Students with Previous College Experience (Transfer Students)

Applicants who have previously attended post-secondary institutions, and not already earned a postsecondary degree after high school graduation, should follow the same application procedures and observe the same deadlines as students with no college experience. If you have earned a postsecondary degree after high school then the high school transcript requirement may be waived.

Admission Requirements for Transfer Applicants

Admission decisions will be based upon applicants’ academic records at all educational institutions attended. Applicants must be in good academic standing and eligible to return immediately to the institution last attended. To be considered for admission, applicants must have cumulative grade-point averages of at least 2.0 on a 4.0 scale for all transferable course work attempted. Remedial, vocational, and courses from institutions that are not regionally accredited (Middle States Association, North Central Association, New England Association, Northwest Association, Southern Association, Western Association) are not transferable. Although credit earned from unaccredited colleges and universities is not accepted at Ball State University as transfer credit, transcripts from all such institutions attended are still required.

Students who apply for admission to Ball State University while currently enrolled at other colleges and universities may be admitted with condition to Ball State on incomplete transcripts based on their current college or university cumulative grade-point averages. Admission granted under such circumstances will be withdrawn if the cumulative grade-point average falls below 2.0.

Students who were not admissible to Ball State out of high school and not offered another pathway into Ball State will be asked to complete a minimum of 24 credits of college-level course work (remedial or skill building classes do not count) and earn a minimum cumulative grade-point average of 2.0 (on a 4.0 scale) at an accredited two- or four-year college or university before being considered for admission to Ball State as a transfer student.

Acceptance of Transfer Credit. Generally, all nonremedial, nonvocational courses in which a student earns a 2.0 or better at colleges and universities accredited by regional accrediting agencies are accepted by Ball State University. Students may petition the appropriate academic department for the acceptance of vocational courses. Only course credit transfers to Ball State University; no grades transfer.

Information about how credits will transfer to Ball State may be obtained through transferin.net or contact the office of admissions at 765-285-8300 or transfer@bsu.edu. Courses at Ball State University are offered on a semester and term basis, and credits earned are in semester hours. To convert quarter hours to semester hours, multiply the number of quarter hours by 2/3. Two semester hours are generally equivalent to three quarter hours. Ball State University has procedures in place to accommodate conversions.

Application of Transfer Credit. For admitted students, the application of transfer credit toward a degree at Ball State University will be articulated based on rules defined by University Academic Affairs. Official Ball State University course equivalents are established by University Academic Affairs in consultation with the appropriate academic department.

Transfer of Credit Earned in Vocational Degree Programs. Vocational degree programs are designed to prepare students for immediate employment rather than for further study at other colleges or universities; therefore, such credits are not directly transferable. For example, degree programs in automotive repair, cosmetology,
commercial driving, etc., are considered to be vocational studies. Exceptions to this rule are made when the providers of occupational programs and Ball State University have agreements for transferring credits.

**IVY Tech Community College of Indiana credits.** Ball State will accept the Ivy Tech credits articulated with Indiana’s public universities if they were taken in the fall of 1993 or later. All other credits earned in the fall of 1995 or later will be accepted in transfer except those courses that are primarily vocational in nature.

**Transfer Student Housing Policy.** All transfer students who have 24 or fewer credits must live in university housing unless they are 21 years of age, married, living with their parents in the parents’ primary residence which is no more than 60 miles from the Ball State campus, or have completed two semesters at Ball State. Admission to the university guarantees housing to transfer students in this category.

**Former Ball State University Undergraduate Students**

Former Ball State students who stop out, for a year or longer time period, and wish to re-enter the university must submit a reenrollment application to the Office of Admissions. This application can be found at bsu.edu/apply. The deadline for reenrollment consideration is seven days before the official start of each term.

Students who have a break in continuous semester attendance or who have attended other institutions since last attending Ball State University and who were in good standing with Ball State University at the time of stop out will be considered reenrolling students.

Former Ball State students not in good academic standing with Ball State University as determined by the Registrar (academic disqualification) must apply for reinstatement. This process requires an application, found at bsu.edu/apply. All documentation must be submitted to the Office of Admissions no later than 7 days before the official start of each term. Applicants should submit documents early in order to complete the requirements for application and to allow time for the committee to consider all documentation.

**Admission of International Students to Ball State University**

Students who are not citizens, permanent residents, asylees, refugees, or Deferred Action for Childhood Arrivals (DACA) of the United States must enroll at Ball State University through the International Admissions.

Prospective students must meet all of the university’s international student admission requirements.

In addition to submitting a special admission application and all supporting academic credentials, students must have evidence of adequate financial support for expenses for one academic year—including tuition, fees, books, supplies, maintenance (lodging and food), health insurance, taxes, and miscellaneous expenditures (clothing, local travel, recreation, toiletries, telephone, etc.) before Ball State may issue visa-enabling documents, if applicable.

An international student intending to enroll at Ball State University may be required to take the TOEFL, IELTS, or Pearson’s PTE before being admitted, regardless of the extent of previous training in English. **Any exceptions to these English proficiency admission requirements must be approved by the International Admissions.** For information about these exams contact TOEFL at toefl.org, IELTS at ielts.org, or Pearson PTE at pearsonpte.com.

Any student admitted conditionally with a score lower than 79 (internet-based) on the TOEFL, 6.5 on the IELTS, or 53 on the Pearson PTE will be required to take an English language proficiency exam during international student orientation to determine the English language courses that must be taken through the Intensive English Institute.

Upon completion of the IEI program or submitting a TOEFL, IELTS, or Pearson PTE that meets minimum admission requirements, the students must pursue full time academic study. **Exceptions to these rules must be approved by the Rinker Center for International Programs.** Any international student may take a course in the Intensive English Institute for noncredit, regardless of whether such a course is required. Any student who is required to take a course in the Intensive English Institute and whose progress is unsatisfactory will be required to repeat the course if the Intensive English Institute, Rinker Center for International Programs, and the chairperson of the relevant department deem it advisable.

Any student offered admission to non-degree study in the Intensive English Institute only must apply as a degree-seeking student and be offered admission before enrolling in credit-bearing academic classes.

Upon enrollment, international students are assessed nonresident tuition and fees for undergraduate and graduate courses offered by the university. The university currently has a limited number of scholarships authorized by the University Board of Trustees that may be awarded to outstanding and deserving students from other countries. These scholarships are equivalent in value to a partial waiver of university tuition fees. No scholarships are available for room, board, or transportation costs.

Successful applicants will be sent documentation allowing them to apply for a student visa through United States consular representatives in their home countries. All
international students are required to participate in a health insurance plan designed for Ball State University students unless approved for a waiver. The premium must be along with nonresident tuition and fees and must be maintained throughout the student’s period of enrollment at the university.

Upon arrival at Ball State, students are required to attend international student orientation during which registration information and other relevant student issues are discussed. An English language examination will be administered to those students who require the test at this time to determine language competency.

Prospective students are encouraged to inquire at least one year before proposed enrollment at Ball State by contacting International Admissions or by visiting bsu.edu/admissions/international. Students who have a break in continuous semester attendance or who have attended other institutions since last attending Ball State and who were in good standing with Ball State at the time of stop out will be considered reenrolling students. Please refer to the information above.

ADMISSIONS REQUIREMENTS AND CLASSIFICATIONS

All new freshman applicants to Ball State University are individually reviewed and evaluated. Admission is based on the following:

- **Strength of curriculum (including the senior year)—** Students should pursue the best college preparatory curriculum available. For Indiana applicants, Ball State requires completion of the academic component of the Core 40 curriculum as the minimum preparation for students who are college bound; however, completion of the Academic Honors Diploma is strongly encouraged. Students from other states should pursue strong college prep curricula.

- **Performance as measured by grades in English, mathematics (Algebra I, Geometry, and Algebra II are minimum requirements), laboratory sciences, social sciences, and foreign languages and overall high school gpa.**

- **Curriculum patterns and grade trends —** The Office of Admissions expects a balanced academic program with at least four college preparatory classes each semester and grades that reflect a steady or upward trend in academic performance.

- **Standardized test scores—SAT and/or ACT scores are not required for admissions to Ball State. Students who believe that their SAT and/or ACT scores are a positive addition to their academic record should submit their test scores.**

- **Honors College Admission**
  
  Indiana applicants who earn Academic Honors Diplomas and out-of-state applicants who pursue comparable curricula may be reviewed for Honors College admission. Performance in academic course work will be evaluated. (See the Ball State University Honors College website for details, bsu.edu/honors.)

- **ENROLLMENT DEPOSIT**
  
  Students admitted as undergraduates to the university for the first time must accept their formal offers of admission by completing the Enrollment Confirmation process and paying the $100 non-refundable enrollment deposit. The deposit will be applied directly to first-semester fees. The deadline for fall and summer semesters is May 1 and for spring semester the deadline is January 1. In cases of financial difficulties, a guidance counselor may request, in writing, that the enrollment deposit be deferred for a student.

- **ORIENTATION**
  
  Freshmen and transfer students participate in a required orientation program. Orientation is a learning experience that helps students understand academic and career expectations, become involved in collegiate life, and learn about the transition period students may experience as they enter college. During Orientation students meet with academic advisors, register for courses, and get their Ball State (ID Card). Admitted students who have confirmed their enrollment deposit will receive information authorizing the student to select an orientation date. Family members are encouraged to attend Orientation.

- **SPECIAL ENROLLMENT**
  
  **Enrollment as Guest Students**
  
  Students regularly enrolled and in good academic standing at other colleges or universities who wish to attend Ball State University for one semester and have their credit transferred back to their home institution and may apply as guest students. To be eligible, students must have minimum cumulative grade-point averages of 2.0 (on a 4.0 scale) and be eligible to return immediately to their home institutions. Guest applications are available at bsu.edu/apply. Students must submit official college transcripts to the Office of Admissions.

  Within seven days of application receipt, applicant will receive notification from the Help Desk providing Ball State Credentials. Additionally, if application is approved, the Office of Admissions will send official notification outlining next steps.
Enrollment as Non-degree Students

Students who wish to enroll for personal and professional development rather than in pursuit of degrees may apply as non-degree students. Non-degree student applications are available at bsu.edu/apply. Students must submit official high school transcripts, the General Education Development (GED) certificate, Test Assessing Secondary Completion (TASC) certificate, High School Equivalency Test (HiSET), or college transcripts. Applicants must have earned a high school diploma or GED/TASC/HiSET certificate and not be currently enrolled in post-secondary institutions. In addition, a student applying that has post-secondary course work must be in good standing – a minimum cumulative grade-point average of a 2.0 on a 4.0 scale and eligibility to return to the last post-secondary institution attended. Please note: financial aid is not available to non-degree students. If you have applied for and been denied on-campus or online admissions, you must have 24 transferable credits from another institution to be admitted as a non-degree seeking student. Non-traditional students must have a GPA of 2.5 or better on their high school transcript to be admitted as a non-degree seeking student.

Initial Enrollment as Non-degree Students. Before course registration, students registering for courses must call Upper Division Academic Advising for appointments, 765-285-5490. Students must meet all course prerequisites and departmental requirements. In addition to academic advising, students will be eligible for other services offered through University College and the Division of Online and Distance Education. If a student does not achieve the academic standards required their first term of enrollment, they are subject to all institutional policies.

Continuing Enrollment as Non-degree Students. The maximum number of semester credits that non-degree students may earn is 30. In addition, students will be subject to all university policies and regulations, including those pertaining to academic probation and dismissal.

Changing to Degree Status. A student may apply as a degree-seeking student at any point during their non-degree status. Students that are admissible, based on the current degree-seeking admission requirements, will be considered for admission for the term they apply. Students that want to apply for degree-seeking status during enrollment as a non-degree seeker, that do not meet admissions requirements will need to be in good academic standing at the conclusion of the semester in which they have completed 20 semester credits to be considered for regular admission. If admitted, students will be eligible to pursue degrees.

Admission as Auditors

All students who meet the general requirements for admission to Ball State University may enroll as auditors in credit courses upon approval of the academic department offering the course and the Office of Admissions. Auditors do not earn academic credits or grades. Students who have audited courses cannot later test out of those courses. Auditors must pay auditors’ fees for each course unless the course requires full fees. Applications can be obtained from the Office of Admissions. three to five days prior to the first day of classes of each semester or term. If an application is approved, applicant must visit the Office of Registrar to be enrolled in requested course. No online courses are available to be audited.

If space is needed for students who want to earn credit in the course, auditors’ registrations will be canceled and their money fully refunded. If auditing students choose not to attend the course, then fees are not refunded. Faculty members may not admit anyone to class as an auditor who has not officially registered.

ADVANCED STANDING

Ball State University offers opportunities to earn credit toward a degree for knowledge students have acquired independently, at work, in the military, through workshops and special classes, and in other ways. Most of these opportunities require that students take an examination to “test out” of a course or group of courses. Credit earned in this way counts toward graduation requirements, but students do not receive a grade for it. Students cannot receive credit of this type for courses for which they have already received credit. Students can earn up to 63 credits through this program.

The opportunities for earning advanced standing are:

• Advanced Placement Program
• International Baccalaureate Certificates or Diploma
• College Level Exam Program (CLEP tests—subject and general)
• Credit by departmental examination
• Credit by departmental authorization
• Credit earned while in military service
• Credit for foreign language proficiency

Any department may, at its discretion, administer an examination for any course offered in the department. The department also determines the standards for passing these examinations. Students who earn passing scores will be granted credit for the courses. Credit by examination will not be awarded to students who have been enrolled or are currently enrolled in the courses for credit or audit. Credit by departmental authorization may be granted for learning experiences the department believes to be the equivalent of college work. No grade is given for this credit. Credit and advanced placement in foreign languages
and mathematics may be awarded through the Advanced Credit Placement Test that is available online and can be taken prior to attending freshman orientation. Testing instructions are mailed to students with their orientation invitation. Students must receive placement through the testing process before registering for the appropriate courses. For more information, visit bsu.edu/admissions/credit to learn how Ball State awards advanced credit.

Ball State University will accept courses for transfer evaluation and advanced standing credit transcript posting only if the student is currently enrolled.

**RESIDENCY**

Because Ball State University is financially supported by Indiana legislative appropriations, resident students pay less in fees than out-of-state students. Residency status, as determined by the Registrar in accordance with rules adopted by the Board of Trustees, is subject to change. Residency status depends primarily upon the length of time a person has lived in Indiana for purposes other than attending a college or university. A minimum residency of a year is required for independent students (not claimed as dependents by parents or guardians on their income tax forms). The student bears the burden of proof in making a claim of resident status. To request a change in residency classification, a student must file an application form and provide proof of residency in Indiana. Copies of the regulations, the Application for Nonresident Fee Exemption, and other information are available in the Office of Registrar, Lucina Hall, Room B43, or at online at bsu.edu/registrar by selecting “Miscellaneous Information” and click “Review guidelines.”

**FINANCIAL AID**

The staff members in the Office of Financial Aid and Scholarships are eager to assist you. Over three-fourths of all Ball State students receive some form of financial aid, including scholarships, grants, loans, and student employment. To be considered for most financial aid programs, the Free Application for Federal Student Aid (FAFSA) must be received by the federal processor on or before April 15. Apply online at fafsa.gov. For more information, contact the Office of Financial Aid and Scholarships at 800-227-4017 or 765-285-5600 or visit bsu.edu/finaid.
Degree Requirements and Time Limit

TIME LIMIT

There is no specific time limit for the completion of undergraduate degrees, but the university reserves the right to review course work that is more than seven years old. Furthermore, the university is neither obligated nor committed to continue courses or programs so that students can take more than the normal four or five years to complete bachelor’s degrees or more than two years to complete associate degrees.

CREDITS

Class standing and grade-point averages at Ball State University are determined at the close of the term on the basis of semester credits. Generally, one hour of class time a week equals one credit. For example, most classes at Ball State carry 3 credits, and they meet for approximately three hours each week.

CLASS STANDING

Undergraduate students are designated as freshmen, sophomores, juniors, and seniors during their academic careers at Ball State. Students who have earned fewer than 30 semester credits are freshmen. Students who have earned 30 credits or more but fewer than 60 credits are sophomores. Students who have earned 60 credits or more but fewer than 90 credits are juniors. Students who have earned 90 credits or more are seniors.

COURSE LOAD

The normal course load in a semester is 12 to 18 credits. (During a semester, 9 to 11 credits is considered a three-quarter-time load; 6 to 8 credits is considered a half-time load.) A total of twelve credits in a semester is considered a full course load for undergraduate students. Freshmen are not eligible to register for more than 18 credits unless they have met the following conditions:

1. They have earned previous residence credit at Ball State University.
2. They have cumulative grade-point averages of at least 3.0.
3. They have successfully completed all of their scheduled courses in the preceding semester or term.

Students who are on academic probation may not register for more than 18 credits in a semester or term.

GRADES

Grades

The university reports and records grades using the plus/minus letter system. Quality points are allocated to each recorded grade according to the following scale:

\[ A = B = C = D = F = \]

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>B</td>
<td>3.33</td>
</tr>
<tr>
<td>C</td>
<td>2.33</td>
</tr>
<tr>
<td>D</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Programs requiring C or better grades will not accept a C-grade (unless specified otherwise). A student’s grade-point average (GPA) is calculated by dividing the total number of quality points by the total number of GPA credits.

A grade of F is recorded when a student fails a course or withdraws from a course after the withdrawal period unless, in the judgment of the dean of the instructor’s college, the reasons for withdrawing from a course warrant a W.

FN (Non-attendance) represents a failing grade awarded to the student who did not attend a course (no completed assignments, no exams, no instructor interaction or other documented engagement in an academically-related activity in the course).

FS (Stopped attendance) represents a failing grade awarded to a student who did not officially withdraw but failed to complete a course (i.e., did not take a final exam, stopped attending, etc.) and failed to achieve the course objectives. Instructors will be required to enter the last date of academic engagement for the student receiving a grade of FS.

A failing grade (F, FN, or FS) is recorded when a student withdraws from a course after the published withdrawal deadline for the semester or term unless, in the judgement of the instructor or college dean, the reasons for withdrawing from the course are such that the student should have a W.

CR is recorded for students registered under credit/no credit provisions who do work that is 2.0 or above.

NC is recorded for students registered under credit/no credit provisions who do work that is below 2.0.

I represents incomplete work and is given only when it is determined that the student should be given an opportunity to finish the work. The instructor, along with the department chairperson, decides whether to award an incomplete grade in a course and outlines the requirements and time limit for completing the work. It is most important that the conditions for removing the I be as specific as possible. Removal of an I grade should be limited to as short a period as possible. CR/NC enrollments will expire to become a failing grade as defined by the
grading method. All other enrollments expire to an $F$ grade. Unless an earlier completion date is specified by the instructor, an $I$ grade awarded for an undergraduate course will expire as follows: for Fall enrollment, by May 1; for Spring and/or Summer enrollment, by December 1. An exception is made when an extension on the timeline has been recommended by a department chairperson and approved by the appropriate dean. The Office of the Registrar will send an email reminder to the student and to the instructor of an $I$ grade on the student record on or about the 15th of every month.

$NR$ represents a grade not properly reported by an instructor. The instructor must assign a grade by the fifth week of the next term. If an $NR$ grade is not removed by the fifth week of the following (academic year) term, the Registrar’s Office will change the grade to $F$ or to $NC$ if it is a credit or no credit course.

$W$ represents an official withdrawal from a course. A “W” is recorded when a student withdraws from a course after the published withdrawal deadline for the semester or term, unless, in the judgement of the instructor, department, or college dean, the reason for course withdrawal does not meet university withdrawal guidelines and the student will receive a failing grade. Students who want to take courses without credit to apply toward a degree (auditors) sign waivers for the specific courses. Students must make audit adjustments prior to the end of the add/drop period for the course term of enrollment. Students earn no academic credit for auditing classes. Such classes are represented by the entry AU on the student’s transcript.

At the close of each semester or term, students may access grades at my.bsu.edu. Any correction in a grade already reported must be made by the instructor and approved by the department chairperson and the dean of the instructor’s college before it is filed in the Office of the Registrar. Any such change must be completed within one year of the close of the session for which the grade was due.

**Dean’s List.** Undergraduates who earn at least a 3.5 grade-point average for 12 or more credits of graded course work during a semester or for 6 or more credits of graded course work during a summer term will be named to the dean’s list for that semester or term. Course enrollment under the grading option of credit/no credit is not used in Dean’s List calculation. This designation will be placed on students’ academic transcript.

**CREDIT/NO CREDIT POLICY**

Students may choose to earn up to 15 credits under the credit/no credit option. If a course is offered only for credit/no credit then it will not count in the fifteen-credit allowance. Students who have taken a course for a grade cannot enroll again on a credit/no credit basis. Courses taken on a credit/no credit basis will not count toward the academic major, minor, or any University Core Curriculum requirements, except for student teaching, internships, and courses offered only for credit/no credit. If a student has taken courses in a particular subject for credit/no credit and then decides to major or minor in that subject, not more than two of the courses will count toward the major or minor requirements. Students on academic probation may not use the credit/no credit option. With these exceptions, departments must allow students to take courses for credit/no credit.

**MINIMUM GRADE REQUIREMENTS**

A student will be placed on academic probation at the close of a term when the cumulative grade-point average is less than 2.0. At the close of a term, the Office of the Registrar will notify students who are on academic probation of their status, including any requirements the University establishes to help improve their academic performance.

Students on academic probation may be required to repeat courses, enroll in no more than 18 credits, take courses in reading and study skills, attend academic progress meetings sponsored by the Office of the Registrar, attend workshops and seminars on academic success, obtain advisor’s approval to make schedule changes, and enroll in class sections that offer supplemental instruction. Students who are informed by the Registrar that they have been placed on academic probation should immediately meet with their academic advisor to discuss plans for improvement.

Academic standing is determined at the end of a semester. To avoid academic dismissal a student on academic probation must meet the following conditions:

- A student with less than 30 earned credits at the end of the semester, (including transfer credit and other credit granted) is required to earn a 2.0 term grade-point average at the end of the probation term and each following term until the cumulative average reaches 2.0 or above.

- A student with 30 or more earned credits at the end of the semester, (including transfer credit and other credit granted) is required to earn a 2.1 term grade-point average at the end of the probation term and each following term until the cumulative average reaches 2.0 or above.

Transferred credits from other colleges and universities will be included in determining the number of completed credits. The grades from those institutions will not be used in figuring the cumulative grade-point average.

Students dismissed from Ball State for academic reasons cannot be reinstated for at least two semesters (summer is considered a semester). To be reinstated, students must complete an application form available from the Office of the Registrar and submit it to the Office of the Registrar for
review by the appropriate date for the term of enrollment. The application cannot be reviewed if a “university hold” has been placed on the student record or if the university has not received official transcripts of grades from all other schools attended since the last semester of attendance at Ball State. Reinstatement to the university does not ensure admission to a particular college or program of study.

Ball State is not obligated to reinstate students who have been dismissed. Students granted reinstatement must show that they have sufficient aptitude to pursue their intended program of study. They must also show signs of increased maturity, increased commitment to education, and adequate financial resources to attend Ball State without excessive employment. Students may not apply for reinstatement more than once in a twelve-month period. Students who have been disqualified will not be reinstated more than once in a three-year period.

All degree programs require that students earn a grade-point average of at least 2.0 overall and in each major, minor, certificate, and the University Core Curriculum. Some programs—for example, teacher education—have higher minimum requirements.

**Academic Clemency.** Undergraduate students who were not enrolled at Ball State University for a five-year period may petition the Office of the Registrar to have grades and credits earned before that period removed from the calculation of their cumulative grade-point averages. Students participating in the program are specifically required to comply with the following provisions:

- The student must not already have an earned degree from Ball State University.
- University records must verify that they were not registered in any capacity at Ball State University for a period of at least five years.
- For students who qualify for academic clemency, all previous Ball State University course work with grades of C or above will be counted for credit only. However, students will lose credit for all courses with grades below C and resume their academic program with no cumulative grade-point average and marks placed in the student record.
- The student’s academic records will be inscribed with the note “Academic Clemency Granted (date).”
- Academic clemency may be used only one time by a Ball State University student.
- Academic clemency is final and irreversible.
- All other policies of Ball State University apply.

Call the Office of the Registrar, 765-285-1722, for more information on the deadlines for applications for reinstatement or academic clemency.

**STUDENT RECORDS**

At the close of each term, enrolled students may view grade reports showing attempted credits, earned credits, quality points, grade-point average for the term, and cumulative grade-point average on the university’s student services Web site my.bsu.edu. Permanent academic records are kept in the Office of the Registrar.

**Midterm Evaluation of Undergraduates**

By the end of the eighth week of the semester, faculty will submit a midterm grade for all students whose grades are C-, D+, D, D–, F, or NC. This policy applies to all classes and grades will be made available to students. Each student’s academic advisor will receive notification of the student’s performance, and, if a student lives in a residence hall, the residence hall director also will receive this information. The purpose of the midterm evaluation is to provide students with information about their current classroom performance as well as provide information to support personnel for students whose performance may result in a grade of less than a C. It is ultimately the student’s responsibility to respond appropriately to this information. The midterm grade does not guarantee a specific performance at the end of the semester but is merely notice of the student’s performance to that time. This policy excludes all summer and part of term classes.

**RIGHT TO BEREAVEMENT LEAVE**

Students will be excused from class in the event of the death of a close friend or member of the student’s family or household. The number of excused absences allowed is determined by the distance of funeral services from Muncie, Indiana, as follows:

- **Three work days** — 150-mile radius of Muncie
- **Four work days** — Between 150-300 mile radius of Muncie
- **Five work days** — Beyond 300-mile radius of Muncie
- **Seven work days** — Outside of North America

If the student is unable to attend the funeral services, the student will be allowed three school days for bereavement. Given proper documentation, the instructor will excuse the student from class and provide the opportunity to earn equivalent credit for assignments missed. If the student is not satisfied with the outcome, he or she may appeal as outlined in Ball State University’s Procedure for Student Bereavement Appeals found in the Code of Student Rights and Responsibilities.

**COURSE REPETITION**

An undergraduate student may repeat a course an unlimited number of times except in cases where a department has imposed repetition limits. The repetition of a course does not remove the previous grades from the student’s official academic record. A W will not replace a previous grade. Unless it is a variable credit course, the last grade in a course will be used in computing the student’s grade-point average. The credits will count only once toward meeting minimum credit requirements for graduation. The
University is not obligated to offer courses so that a student can repeat them. Students are strongly encouraged to meet regularly with an advisor. The university reserves the right to modify or cancel courses when necessary because of accreditation requirements, insufficient enrollment, lack of staff members, or for financial or other reasons. In addition, the chairperson of a department can transfer students from one section of a class to another section of the same class. Departments can substitute courses to meet major and minor requirements as long as the substitution does not reduce the number of credits required in the program. Either a student or a department can request a course substitution before the alternate course is taken. The department chairperson must sign a copy of the approval of the substitution; the form must then be submitted to the appropriate advising center. Students who need to change their class schedules can do so any time after their initial registration through the end of the add/drop time frame. There is no charge for changes made during this time frame.

EXTENDED EDUCATION COURSES

The Division of Online and Strategic Learning offers a wide variety of courses to meet continuing or extended education needs.

Students enrolled in extended education courses are entitled to the support services of University Libraries and Unified Technology Support. Access to other services and facilities is only available to students who have paid all necessary fees.

Ball State students enrolled in any online or off campus education course will only receive residence credit for those courses that originate at Ball State University. For students pursuing a degree at Ball State University, there may be a limit to the number of independent learning credits that will count toward a major or minor. To inquire about the limitations governing degree programs, contact the academic department responsible for the major or minor.

WITHDRAWAL

Withdrawal from a Course

Change of Course Period

Students may make changes to their schedule through the add/drop period. Specific calendar dates may be viewed on the website bsu.edu/Registrar. Courses dropped through this period are not recorded on the student’s permanent record.

Course Withdrawal Period

Students may withdraw from courses from the start date of the course through 60% of the scheduled duration of the course. Specific calendar dates may be viewed on the website at bsu.edu/registrar. NOTE: Saturday is not considered a class day for these purposes.

The course withdrawal period is determined according to the following schedule:

- from the eight to the forty-fifth day of classes in a fall or spring semester;
- from the eight to the thirtieth day of classes in a summer semester;
- from the fourth to the fifteenth day of classes in a five week session.
- From the fifth day to the twenty-fourth day of classes in an eight week session.

Students wishing to withdraw from a course during this period should first discuss the withdrawal with their instructor. All student-initiated withdrawals will be recorded as a final grade of W during this period. However, students who discontinue enrollment or who abandon courses without following the withdrawal policy’s procedures will normally earn a failing grade in those courses. Students should contact the Office of Financial Aid and Scholarships prior to withdrawing to determine how it will affect your financial aid. To see the impact of the withdrawal on your bursar account view your ebill account online. Additional information can be found at bsu.edu/bursar.

Withdrawal after the Course Withdrawal Period

If there are verifiable extenuating circumstances which make withdrawal from a course academically justified after the withdrawal period ends, the college dean or designate may grant an exception to the above withdrawal policy. The faculty member is responsible for recording the last date of attendance and determining a withdrawal or failing grade. A "W" is recorded when a student withdraws from a course after the published withdrawal deadline for the semester or term unless, in the judgment of the instructor, department, or college dean, the reason for course withdrawal does not meet university withdrawal guidelines and the student will receive a failing grade. To see the impact of the withdrawal on your bursar account, view your ebill account online. Additional information can be found at bsu.edu/bursar.

Withdrawal from All Classes

Students who find it necessary to withdraw from all courses during a semester must immediately contact the appropriate university office, as follows: Students enrolled in all main campus courses, or in a blended schedule of main campus and online/distance education courses, should contact the Office of Retention and Graduation, SC L-20, 765-285-3312. Students enrolled exclusively in
DEGREE REQUIREMENTS AND TIME LIMIT

15

DEGREE REQUIREMENTS

AND TIME LIMIT

15

courses through Online and Distance Education should see
bsu.edu/distance, or call 1-800-872-0369.

A student may be eligible for a refund of registration fees charged only if the student withdraws from all classes during any semester. Further, the only fees that are eligible for a refund are registration fees. There is no refund of the applied music fee for either the matriculated or the non-matriculated student.

The following schedule indicates the prorated portion of the registration fees a student may be eligible to receive provided the student complies with the University’s policy for withdrawing from all classes through the appropriate office.

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CLASS ATTENDANCE

A student’s enrollment is regarded as a contract with the university. Since full performance requires, in part, regular and punctual class attendance, students are expected to attend all classes for which they are registered. Faculty will establish attendance policies for their courses and communicate those policies through course syllabi or outlines.

Students who know they must be absent from a class should notify the instructor or departmental office. Courtesy requires that students speak to the instructor and preferably present a signed and dated memo briefly stating the reasons for absence.

Faculty members are responsible for keeping records of attendance of all students registered in each class. Students are responsible for completing any work they have missed. The faculty member is not required to do extra teaching to help students “catch up.”

FIELD TRIPS

Field trips consistent with the purpose of the course should be planned at the beginning of the semester. Absence caused by field trips in a course or by official university responsibilities will be announced in advance to the instructors of the course(s) in which the student is enrolled. Students obtain these notices through the department chairperson’s office and take them to their instructors at least three days in advance of the absence. No field trips, travel, or other special events involving students are scheduled during the first week or the last two weeks of a semester. Exceptions will be granted only after consultation with and approval by the Provost and Vice President for Academic Affairs and the Vice President for Student Affairs. Whenever possible, trips should be scheduled for weekends.

Field trips are voluntary, but a course grade may be lowered if students do not go on a field trip and do not complete adequate make-up work as assigned.

INTERNSHIPS AND PRACTICA

The university encourages student internships and practica. Internships and practica are defined as supervised practical experience in a student’s field of study. In order to be recorded on the student’s academic transcript, the internship or practicum must have an academic component. Academic supervision must be conducted by faculty in the student’s major or minor course of study in collaboration with a supervisor at the internship or practicum site. Academic internships and practica must be approved by the department chairperson or a designated representative of the student’s major or minor course of study.

GRADUATION

Students must apply for graduation. Application forms are available in the advising centers or online, and it’s a good idea to check the deadline date toward the end of your junior year to be reading the following year. The application is due early the term before the semester you graduate.

Graduation with Honors

Students completing all university requirements for graduation with a grade-point average of 3.9 or higher will graduate summa cum laude. If the grade-point average is between 3.8 and 3.899, students will graduate magna cum
laude. If the grade-point average is between 3.6 and 3.799, students will graduate *cum laude*.
The grade-point average upon which graduation honors are determined includes all work at Ball State University completed for graduation. In addition, transfer students must have earned a minimum of 60 semester credits at Ball State University to be eligible for honors.

**Associate Degrees with Academic Distinction**
Students graduating with associate degrees who maintain at least a 3.6 grade-point average will receive a designation of Associate of Arts/Science with Academic Distinction on their academic transcripts. Transfer students must have earned a minimum of 30 semester credits at Ball State University to be eligible for Academic Distinction.
Educational Opportunities and Student Services

PREPROFESSIONAL PROGRAMS

Ball State University offers courses students may take to prepare for admission to schools of law, medicine, dentistry, engineering, audiology, speech pathology, or pharmacy. The prelaw program is described in the Department of Political Science; predentistry, premedicine, and prepharmacy in the Department of Biology; preaudiology and pre-speech pathology in the Department of Speech Pathology and Audiology; and pre-engineering in the Department of Physics and Astronomy.

OTHER EDUCATIONAL OPPORTUNITIES

University College

University College is an academic unit offering comprehensive programs and services to enhance students' academic success at Ball State University. University College is the home for academic advising for all freshmen regardless of major. Students receive advising through University College until they achieve sophomore status and declare a major, at which time they will receive faculty advising in one of Ball State’s eight degree-granting colleges. In addition, University College houses the Learning Center, which offers free peer tutoring, Supplemental Instruction, and other forms of academic assistance to all Ball State students. The college coordinates the University Core Curriculum, the liberal arts component required of all Ball State undergraduate degrees.

Additional University College programs and services include:

- PACE (Partnership for Academic Commitment to Excellence), a program of academic assistance for freshmen on academic probation.
- ID 101, the freshman seminar course.
- Specific programs for exploratory (undecided) students, students with disabilities, and student athletes.

For information about specific services, call University College at 765-285-1510.

Rinker Center for International Programs

The Rinker Center for International Programs is Ball State's central facility for international activity on campus. In cooperation with faculty, students, and the local community, the center's administrative services support Ball State's commitment to international teaching and learning. Each year, Ball State hosts international students and scholars from more than sixty countries; the center offers admissions and orientation assistance. Study abroad programs open to all Ball State students give students the opportunity to explore intercultural issues outside the classroom. Programs vary in length, location, and cost, and credit is offered on most programs, so that students who participate are not required to delay graduation.

Information on international work and internship opportunities is also available at the center.

For information on the services offered by the Rinker Center for International Programs, call 765-285-5422.

Ball State Online

Ball State University serves the needs of students who are pursuing fully online degrees and certificates, as well as those seeking a blended experience of online and face-to-face courses.

Ball State Online offers all the advantages of a Ball State degree – highly trained faculty, quality courses, and more – but it’s delivered on your schedule and at a competitive price. Our award-winning programs offer our students both quality and value. We offer more than 70 online degrees, certificates, and educator licenses.

Paired with our quality educational experiences, Ball State is the first higher education institution in the country to earn Learner Support Program Certification for its online programs. The honor is given by Quality Matters (QM), a leading quality assurance organization for online education. It recognizes online programs that provide all the critical student and academic services needed for learner success and uses learner feedback to continuously improve those services.

Online courses can and are frequently taken by on-campus students who wish to supplement their on-campus schedules or eliminate schedule conflicts with other on-campus classes.

For more information, visit www.bsu.edu/online.

The Office of Student Life

Student Life supports the academic mission of the university through leadership development, civic engagement, and service learning opportunities for students. In partnership with faculty and academic units, students participate in service learning experiences coordinated through Student Voluntary Services (SVS). Additionally, students may receive academic credit by participating in leadership development courses as part of the Excellence in Leadership program as well as the interdisciplinary leadership studies minor offered through the Department of Educational Leadership. Student Life also supports the administrative and developmental needs of 400+ registered student organizations that contribute to the student experience on campus. For more information,
call the Office of Student Life at 765-285-2621 or visit our Web site www.bsu.edu/studentlife.

Student Government Association
Student Government Association (SGA) serves as the collective voice for student concerns, provides valuable services for Ball State students, and invites all students to get involved in campus governance. For more information, please contact Student Government Association at 765-285-8631 or go to our website at www.bsu.edu/sga.

STUDENT SERVICES

Career Center
The Career Center offers opportunities for each Ball State University student and graduate to engage in:
• One on one career coaching with a career coach assigned to students in each academic area.
• Developing a clear career objective, obtaining relevant experience, and learning the skills necessary to conduct a successful professional job search.
• Connecting with employers through on-campus career fairs and interviews with recruiters from business, industry, government, and educational organizations seeking interns and graduates at all degree levels.
• Skills training through programs such as practice interviews, KEY Careers, Inter-Ready, and Career-Ready.
• On-campus part-time student employment.
• Up-to-date materials on careers, salaries, the job-search process, and graduate and professional school preparation; career brochures and publications on self-assessment, career exploration, resume writing, interviewing, job success, social media presence, and other items.
• The Career Center also provides support to internship programs across campus.

For more information, call the Career Center at 765-285-1522, visit the office’s Web site at www.bsu.edu/careers, or come to Lucina Hall 220.

Counseling Center
The Counseling Center provides a broad range of counseling programs and services that are designed to help students reach their educational and personal goals. They include workshops, group counseling, individual counseling, testing, urgent consultation, psychiatric consultation, and outreach programs. Services are free and confidential and are provided by therapists who have special backgrounds and experience with young adults. Appointments can be made in person or by calling the receptionist in Lucina Hall, room 320, 765-285-1736.

Disability Services
The Office of Disability Services coordinates university efforts to provide access and opportunity to students with disabilities, including students who have disabilities that are non-apparent. Students wanting to learn more about services or accommodations available to those with a documented disability should contact the Disability Services office. Advance notice in planning services is strongly encouraged. Please visit Student Center 116, call 765-285-5293, TTY users 765-285-2206, or refer to our Web site www.bsu.edu/disabilityservices or e-mail: dsd@bsu.edu.

Health Center
The Health Center is funded by a separate fee required each semester of all students who wish to receive services. The fee covers office visits to the main Health Center clinic, the Women’s Center, and Physical Therapy. Laboratory testing, x-ray services, and prescriptions, if required, are not covered. Services are provided by a dedicated and experienced professional staff of physicians, nurse practitioners, and nurses who specialize in primary care. The Health Center is also responsible for reporting compliance with vaccine requirements to the State of Indiana. Since Fall 2018, there is a new requirement for the meningitis B vaccine. Please check our website at bsu.edu/healthcenter/admreq for details regarding the list of all required vaccines. Vaccination records must be submitted directly to the Health Center. Students who do not complete this requirement will have a hold placed on their record that can affect class registration.

Multicultural Center
The Multicultural Center supports and advances the university’s commitment to diversity and inclusion. Our programs and services address the co-curricular needs of all students by promoting multicultural understanding, sustaining an inclusive environment for a diverse student population, and celebrating the historical contributions of diverse groups. We also serve as a resource for students of color and LGBTQ students. For more information please visit our Web site at www.bsu.edu/multiculturalcenter or call 765-285-1344.

Unified Technology Support
Unified Technology Support (UTS) has brought together technology support professionals from across campus with the goal of providing you with outstanding technology support. The UTS Tech Center is centrally located on campus in the Bracken Library (BL 101). The Tech Center provides technology support to faculty, staff, and students in a comfortable, collaborative, and inviting space.
When visiting the Tech Center, your first stop is the Concierge Desk. Our courteous staff of student employees
will help determine which support area in the Center will meet your immediate needs. As an enrolled student, you will have access to the computer labs and testing facilities throughout campus; the Technology Store, for purchasing tech accessories and equipment or computers and software at a discount; the Technology HelpDesk, to answer technology-related questions; and TechTime, a hardware and software support service that will help resolve problems with your computer equipment, software installations, memory, or hard drives. UTS is service-driven. We’re here to help you use technology to your advantage and enhance your educational experience! For more information, visit our Web site: www.bsu.edu/uts.

University Libraries
Ball State University Libraries serves users by providing access to and assistance with resources to meet student information needs related to the teaching curriculum, research mission, service programs and general interest. The Libraries also provide a range of physical spaces to support individual and collaborative learning. The University Libraries, comprised of the Alexander M. Bracken Library and the Architecture and Science-Health Science branch libraries, offer convenient access to more than 1.5 million books, periodicals, digital resources, DVDs, CDs, microforms, software, government publications, maps, manuscripts, music scores, archival records, and electronic databases.

The University Libraries’ home page provides access to an array of research resources and services including full-text databases, course reserves, online tutorials, interlibrary loan, digital resources, library information and much more. OneSearch, available from the homepage, is a powerful tool and the primary entry-point for discovering resources in the Libraries’ collections – online, media and print. Friendly assistance in using these resources, as well as help with beginning or advanced research, is available at the Reference Desk, Bracken Library, First Floor West, 765-285-1101, or via email, live chat, and/or text msg. Extended individual help, featuring one-on-one reference appointments with research librarians, is a great way to get started on a research project. Research guides for over 200 popular subjects and short tutorials are available to further assist students in the research process. Digital equipment, including laptops, data projectors, camcorders and video cameras, webcams, power cords, adapters, and more are available for use from Educational Technology Resources and Collections. Bracken Library features multimedia workstations for video editing, GIS, and other intensive computing applications. Bracken Library is open a generous 123 hours weekly during academic semesters, with hours to meet the needs of both early birds and night owls. The library’s arrangement of service, collection, and study areas facilitates access to information sources. Library personnel are available at each service point to assist library users. Group study rooms are available for collaborative use throughout Bracken Library and may be reserved online.

Wireless connectivity is available throughout the libraries. Scanners, a large-format printer, laminating, and standard-format color and B&W printers and photocopiers are available. Bracken Library hosts the Bookmark Café, featuring hot and cold beverages and light snacks. Follow the University Libraries on Facebook, Twitter, Instagram, and Pinterest for the latest in Bracken Library and the branches.

Working Well Programs
Working Well Programs offers employees and students a variety of family services to help them balance their responsibilities to both the university and to their families. Information on relocation, movers, utilities and other community services, local school systems, and employment opportunities for partners, and things to do (in Muncie) is available online 24/7 under Relocation at bsu.edu/hrs.
Academic Programs

DEGREES

Bachelor's Degrees
Ball State University offers the following baccalaureate degrees: bachelor of arts, bachelor of architecture, bachelor of athletic training, bachelor of fine arts, bachelor of general studies, bachelor of landscape architecture, bachelor of music, bachelor of science, bachelor of social work, and bachelor of urban planning and development.

The bachelor of landscape architecture is a five year degree and requires a total of 151 credits. The bachelor of architecture is a five year degree and requires a total of 154 credits.

The bachelor of arts, bachelor of athletic training, bachelor of fine arts, bachelor of general studies, bachelor of music, bachelor of social work, bachelor of science, and bachelor of urban planning and development degrees are four year degrees (eight semesters) and require a minimum of 120 credits to complete.

For the bachelor of arts, bachelor of science, and bachelor of music degrees, some majors require more than 120 credits, and may require more than four years to complete. See individual departments for descriptions for specific majors.

The requirements for these degrees follow.

Bachelor of Arts (BA)

This degree program requires two years (or the equivalent) of study in one foreign language or American Sign Language, normally courses through the full second year level. By taking a placement exam, students may be eligible to begin their studies at a level higher than the 101 level, depending on the program of study.

University Core Curriculum: Courses in the University Core Curriculum

Concentration area: Courses in major area of study

This five-year degree requires a total of 154 credits.

Bachelor of Athletic Training (BAT)

University Core Curriculum: Courses in the University Core Curriculum

Concentration area: Courses in major area of study

Electives: As many credits as needed to bring the total to 120

Bachelor of Fine Arts (BFA)

University Core Curriculum: Courses in the University Core Curriculum

Concentration area: Courses in the major area of study

Electives: As many credits as needed to bring the total to 120

Bachelor of General Studies (BGS)

University Core Curriculum: Courses in the University Core Curriculum

One of the following concentrations:

General Studies Concentration:

Concentration areas: A single area of emphasis of at least 36 credits approved by a department

or Two separate areas of emphasis of at least 18 credits
each with each area approved by a department

or Two minors

or One minor and one 18 credit area of emphasis with the area of emphasis approved by a department

A total of 36 credits is required.

*Electives:* As many credits as needed to bring the total to 120

**Specialized Studies Concentration:**

*Concentration area:* A single area of emphasis of at least 36 credits in a department, school, or center. Concentration must have approval of a department, school, or center, and the student’s transcript will contain a comment regarding the title of the concentration (upon completion). An application is required for this concentration. Students must obtain the approval of the area of emphasis before the completion of the last 30 credits.

*Electives:* As many credits as needed to bring the total to 120

The Bachelor of General Studies is not available to any student who has earned a bachelor’s degree.

**Bachelor of Landscape Architecture (BLA)**

*University Core Curriculum:* Courses in the University Core Curriculum 36 crs

*Concentration area:* Courses in major area of study 121 crs

This five-year degree requires a total of 157 credits.

**Bachelor of Music (BM)**

*University Core Curriculum:* Courses in the University Core Curriculum 36 crs

*Concentration area:* Courses in the major area 90-94

**Bachelor of Science (BS)**

*University Core Curriculum:* Courses in the University Core Curriculum 36 crs

*Concentration area:* Courses in the major area of study or Medallion Scholar

*Electives:* As many credits as needed to bring the total to 120

**Bachelor of Social Work (BSW)**

*University Core Curriculum:* Courses in the University Core Curriculum 36 crs

*Concentration area:* Courses in the major area of study 69 crs

*Electives:* As many credits as needed to bring the total to 120

**Bachelor of Urban Planning and Development (BUPD)**

*University Core Curriculum:* Courses in the University Core Curriculum 36 crs

*Concentration area:* Courses in the major area of study 82 crs

*Electives:* As many credits as needed to bring the total to 120

**Second Bachelor’s Degree**

Students who have already earned a bachelor’s degree may earn a second one from Ball State. They must meet all of the requirements for the second degree, including at least 30 residence credits after completing the first degree. If the first bachelor’s degree is from another accredited college or university, students must meet all requirements for the second degree. This includes all requirements for the Ball State University Core Curriculum, except the Writing Proficiency Requirement, and 30 residence credits.
Students with baccalaureate degrees from accredited institutions who are pursuing a second baccalaureate degree from BSU are exempt from the Writing Proficiency Requirement. The Bachelor of General Studies degree is not available to any student who has earned any other bachelor’s degree.

**Concurrent Bachelor’s Degrees**

Concurrent bachelor’s degrees are two degrees earned simultaneously with majors that lead to distinctly different degrees. Students may receive concurrent degrees only if earning two majors under the same degree is not possible. A minimum of 150 credits must be earned for concurrent degrees. Students must meet the following academic standards to pursue two degrees concurrently:

- Have completed at least one graded semester at Ball State University.
- Have earned at least a 2.5 cumulative grade-point average (GPA).
- Be in good academic standing according to university policy.

The Bachelor of General Studies degree cannot be earned concurrently with any other bachelor’s degree. Students must submit an application to the Director of Academic Advising for approval to pursue concurrent degrees.

**ASSOCIATE DEGREES**

Students pursuing associate degrees who wish to continue their education may transfer to curricula leading to baccalaureate degrees.

**General Arts.** This two-year program in general education includes many of the requirements of the basic University Core Curriculum for the four-year curriculum. It leads to the associate in arts degree.

General Education, 31 credits

- ENG 103 Rhetoric and Writing 3
- ENG 104 Composing Research 3
- 6 credits from
  - COMM 210 Fundamentals of Public Communication 3
  - HIST 150 The West in the World 3
  - MATH 125 Quantitative Reasoning 3

Distribution requirements (15 credits):

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical, earth, and life sciences</td>
<td>3</td>
</tr>
<tr>
<td>Social and behavioral sciences</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Two courses from the distribution areas above</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 31

Electives (29 crs)

Subtotal: 60

Students qualifying for exemption from ENG 103 or ENG 104 will receive credit for the course(s). ENG 101 and ENG 102 may be substituted for ENG 103. The residency requirement will be waived for students who complete this program by correspondence. The Associate in Arts Degree in General Arts may not be earned concurrently with any other associate’s degree and is not available to any student who has earned an associate’s degree or bachelor’s degree.

**Other Associate Degrees.** Ball State University offers associate in arts degrees and associate in science degrees in several subjects. Requirements for the degrees are described under the following departments that offer the degrees:

<table>
<thead>
<tr>
<th>Degree</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Technology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Criminal Justice and Criminology</td>
<td>Criminal Justice and Criminology</td>
</tr>
<tr>
<td>Radiography</td>
<td>Nutrition and Health Science</td>
</tr>
</tbody>
</table>

**Minimum Credit Requirements**

The associate in arts and the associate in science degrees are two-year degrees (four semesters) and require a minimum of 60 semester credits to complete. The bachelor of arts, bachelor of athletic training, bachelor of fine arts, bachelor of general studies, bachelor of music, bachelor of social work, bachelor of science, and bachelor of urban planning and development degrees are four-year degrees (eight semesters) and require a minimum of 120 semester credits to complete. For the bachelor of arts, bachelor of science, and bachelor of music degrees, some majors require more than 120 semester credits, and may require more than four years to complete. See individual departments for descriptions for specific majors.

**CERTIFICATES**

Academic departments may offer undergraduate certificates, defined as a focused collection of at least 12 credits of courses that, when completed, afford the student some record of coherent academic accomplishment in a given discipline or set of related disciplines. Students may be enrolled full time or part time in a certificate program, but must meet the minimum academic requirements.
established for all undergraduate students. No course with a final grade below a C (2.0) will count toward an undergraduate certificate and students must achieve a GPA of at least 2.0 in all certificate programs. Transfer credits cannot be applied to the completion requirements for certificates. Completion of an undergraduate certificate does not guarantee admission into an undergraduate degree program.

**CERTIFICATE IN APARTMENT MANAGEMENT**

**21 CREDITS**

Required Courses

- ACC 201 Principles of Accounting 1 3
- HOSP 210 Customer Service 3
- PMGT 104 Housing Decisions 3
- PMGT 235 Introduction to Residential Property Management 3
- PMGT 275 Marketing and Leasing Residential Properties 3
- PMGT 305 Maintenance for Property Managers 3
- PMGT 405 Management of Government-Assisted Housing 3

Subtotal: 21

The Certificate in Apartment Management is not open to students pursuing a major or minor in residential property management. Students must earn a minimum grade of C in all required courses.

**CERTIFICATE IN AQUATICS: INSTRUCTION**

**12 CREDITS**

Required Courses

- AQUA 219 Aquatic Sports Officiating 1
- AQUA 301 Instructor of CPR and First Aid 2
- AQUA 315 Water Safety Instructor (WSI) 3
- AQUA 316 Aquatic Fitness Instructor 3
- AQUA 404 Lifeguard Instructor (LGI) 3

Subtotal: 12

Students must earn a minimum grade of C in all required courses.

**CERTIFICATE IN AQUATICS: OPERATIONS**

**13 CREDITS**

Required Courses

- AQUA 454 Swimming Pool Operation and Maintenance 3
- AQUA 455 Aquatic Facilities Management and Programming 3
- AQUA 456 Camp Waterfront Administration 2
- AQUA 457 Aquatic Facility Design 2
- AQUA 458 Aquatic Leadership and Staff Development 3

Subtotal: 13

Students must earn a minimum grade of C in all required courses.

**CERTIFICATE IN AQUATICS: SCUBA LEADERSHIP**

**12 CREDITS**

Required Courses

- AQUA 216 Lifeguard Training 3
- AQUA 220 Open Water Scuba 2
- AQUA 221 Advanced SCUBA Diver 2
- AQUA 224 Divemaster 2
- AQUA 260 Emergency Medical Responder 3

Subtotal: 12

Students must earn a minimum grade of C in all required courses.

**CERTIFICATE IN BEHAVIORAL STUDIES**

**12 CREDITS**

Requirements List

- SPCE 280 Behavior Analysis: Principles, Procedures, and Philosophy 3
- SPCE 307 Ethical and Professional Practice in Behavior Analysis 3
- SPCE 310 Application and Consultation in Applied Behavior Analysis 3
- SPCE 315 Advanced Behavior Analysis 3

This program is offered on-line only. Students must earn a minimum grade of C in all required courses. Not open to students with a major or minor in applied behavior analysis.

**CERTIFICATE IN BIOTECHNOLOGY**

**20-26 CREDITS**

Required Courses

- BIOT 490 Introduction to Recombinant DNA and RNA Techniques 3
- BIOT 491 Theory and Applications of the Polymerase Chain Reaction 3
- BIOT 492 Protein Isolation and Analysis 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOT 493</td>
<td>Professional Development in Biotechnology</td>
<td>1</td>
</tr>
<tr>
<td>BIOT 494</td>
<td>Cell Culture Techniques</td>
<td>2</td>
</tr>
<tr>
<td>BIOT 495</td>
<td>DNA Sequencing and Bioinformatics</td>
<td>2</td>
</tr>
<tr>
<td>BIOT 496</td>
<td>Research Design and Presentation</td>
<td>2</td>
</tr>
<tr>
<td>BIO 446</td>
<td>Applied Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
<tr>
<td>BIO 452</td>
<td>Advanced Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 453</td>
<td>Human Genetics and the Problems of Humanity</td>
<td>3</td>
</tr>
<tr>
<td>BIO 454</td>
<td>Development and Evolution of Genomes: Genomics and Proteomics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 456</td>
<td>Cancer Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 457</td>
<td>Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 470</td>
<td>Developmental Biology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal: 3-4</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 369</td>
<td>Internship in Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIO 394</td>
<td>Practicum in Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIO 498</td>
<td>Undergraduate Research</td>
<td>1</td>
</tr>
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<td></td>
<td><strong>Subtotal: 1-6</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 215</td>
<td><em>Prerequisite for the program. Students must earn a minimum grade of C in all required courses.</em></td>
<td></td>
</tr>
</tbody>
</table>

**CERTIFICATE IN ENTREPRENEURIAL STUDIES IN MUSIC**

**17 CREDITS**

**Required Courses**

- ECON 116 Survey of Economic Ideas 3
- ECON 201 Elementary Microeconomics 3
- ENT 241 The Entrepreneurial Experience 3
- MUSP 495 Entrepreneurship for Musicians: Seminar 2
- MUSP 496 Entrepreneurship for Musicians: Practicum 3
- MUSP 497 Entrepreneurship for Musicians: Capstone 3
- ACC 200 Accounting for New Ventures 3
- BUSA 302 Career Management: Tools, Processes, and Strategies 3
- ENT 342 Marketing for New Ventures 3
- ENT 343 Venture Leadership 3
- FIN 300 Principles of Finance 3

**Subtotal: 17**

*Open only to* majors in the School of Music. Students must earn a minimum grade of C in all required courses.

**CERTIFICATE IN INFANT/TODDLER SPECIALIZATION**

**18 CREDITS**

**Required Courses**

- ECYF 202 Child and Family Wellness 3
- ECYF 310 Promoting Prosocial Behavior in Young Children: Guidance and Cultural Factors 3
- ECYF 315 Infant Toddler Curriculum and Environment 3
- ECYF 320 Leadership and Management in Child Development Programs 3
- ECYF 380 Parenting 3
- ECYF 493 Internship in Family and Child 3

**Subtotal: 18**

This program is offered on-line only. Students must earn a minimum grade of C in all required courses.

**RESIDENCE CREDIT REQUIREMENTS**

Any course offered for credit by Ball State University is designated as residence or campus credit. Credit by departmental authorization is not considered to be residence credit. However, credit earned through various testing plans is considered residence credit.

**Bachelor's Degrees** — For students pursuing a baccalaureate degree, at least 30 of the last 40 credits must be residence credits.

**Business Majors** — For students majoring in a program in the Miller College of Business, the last 30 credits must be earned in residence.

**Medical Technology** — See Medical Technology, Department of Biology (p. 170).

**Preaudiology** — See Preaudiology, Department of Speech Pathology and Audiology (p. 155).
Pre-Dentistry — See Pre-dentistry, Department of Biology (p. 170).

Pre-engineering — See Pre-engineering, Department of Physics and Astronomy (p. 222).

Associate Degrees — For an associate degree, a student must complete at least 15 of the last 20 credits in residence at Ball State University.

Second Bachelor’s Degree — Students who are pursuing a second bachelor’s degree must complete at least 30 semester credits in residence once the first degree is finished.
UNIVERSITY CORE CURRICULUM

A. Preamble: Core Goals for Undergraduate Education

Graduates of Ball State University are individuals who realize their intellectual potential, who seek to add breadth and depth to their perspectives, and who maintain their physical well-being.

Graduates of the university command extensive knowledge and a mature repertoire of cognitive, practical, and technological skills. They exhibit integrity and responsible action in their social, professional, and civic lives. They respect the histories, cultures, and needs of others. They inform their decisions through critical, creative, and scientific reasoning, and they discern the consequences of their decisions and actions at the local, national, and global levels. They acknowledge responsibility for environmental well-being and for the civic engagement that a diverse democracy requires.

Employing scientific, critical, and creative thinking, Ball State graduates transform

**Experience** into **information** (isolate discrete, recognizable and usable facts),

**Information** into **knowledge** (analyze facts within an intellectual framework, discover meaning in experience),

**Knowledge** into **judgment** (reflect on knowledge gained to make choices and direct what they think, say and do),

**Judgment** into **action** (take individual responsibility and contribute to the well-being of their communities).

B. Goals and Objectives

To achieve this vision and accomplish these transformations, student learning experiences are guided by a recursive, intellectual development process inherent in the following goals:

1. **To transform experience into information**, Ball State graduates are intentional learners who
   - accurately observe and measure elements of the natural and social worlds,
   - are alert to the importance of context,
   - explore diverse ways of knowing,
   - develop strategies for reflecting on experience.

2. **To transform information into knowledge**, Ball State graduates are informed, flexible thinkers who
   - analyze data to reveal existing patterns of information and to create new patterns;
   - understand the various ways that information is incorporated into branches of knowledge;
   - work independently as well as collaboratively to generate knowledge;
   - develop an intellectual framework with which to synthesize information from multiple sources;
   - adapt their intellectual framework to accommodate new information;
   - develop the art of communication—oral, visual, and written—in more than one language (natural and/or symbolic).

3. **To transform knowledge into judgment**, Ball State graduates are critical and creative thinkers who
   - use multiple sources of information and knowledge in forming judgments;
   - evaluate strengths and weaknesses of arguments and actions;
   - understand the ethical implications of possessing and using knowledge;
   - take an inquiring stance toward the world while appreciating the contributions of tradition;
   - consider and understand others’ values as well as their own;
   - value diversity in the social and natural world;
   - develop effective decision-making strategies based on an awareness of their own strengths and weaknesses;
   - understand how their actions affect the complex, interrelated systems that compose our environment.

4. **To transform judgment into action**, Ball State graduates are responsible learners who
   - recognize the responsibilities of an educated person to self, family, community, country, and the world;
   - accept the responsibility to act on their principles;
   - adapt to change;
   - work with others to overcome obstacles to communication, building consensus for action;
   - communicate effectively—in oral, visual and written modes, and in more than one language (natural and/or symbolic);
   - adopt habits of mind for continuous inquiry about themselves, others, and the world;
   - act responsibly given the dangers to and the fragility of the natural environment;
   - make and act on a commitment to health and wellness.

C. Rationale for the University Core Curriculum (UCC)

In keeping with the recursive nature of learning transformations and the goals stated in the Preamble and the Goals and Objectives, the core curriculum is designed to enable students to

- realize their intellectual potential,
- add breadth and depth to their educational experience,
- increase their personal well-being, and
- participate actively in their communities.

Moreover, the University recognizes its responsibility to ensure that students are conversant with ways of knowing, with criteria for judgment, and with types of information
outside their majors. To succeed in the 21st Century, where work often requires a group effort by experts from multiple disciplines, university graduates will need to form, lead, or be members of problem-solving, brainstorming, or decision-making teams in a wide variety of professional settings. Thus the core curriculum requires students to engage disciplines outside the domains of knowledge in which their majors reside, to develop skills in written and oral communication, to become mathematically, scientifically, and historically literate, and to understand issues in the areas of physical wellness and personal finance. Any forward-looking curriculum must also address the mounting issues, problems, and opportunities in the areas of civic engagement, diversity, and international and environmental awareness.

The UCC has six distinguishing features:

- **Intellectual development:** As indicated in the Preamble and Goals and Objectives, UCC courses must have intellectual development goals, not simply content area requirements.

- **Exposure to multiple domains:** The UCC ensures that students will be able to distinguish among domains of knowledge based on their specific epistemologies and methods, as well as on the basis of content.

- **Integration of 21st Century skills:** In addition to developing writing skills beyond those of the required course in English composition, the UCC asks students to engage issues related to civic life, diverse cultures, and the environment, not in separate courses for each of these areas, but in courses that address one or more of these areas either inside or outside the major, inside or outside the UCC.

- **Integration of Core courses and the major:** The UCC allows course work in the major to count for as many as six credits in the Core as long as the courses in the major meet learning transformation requirements.

- **Experiential/immersion experience or similar learning experience:** The UCC envisions that students will demonstrate the ability to work successfully in the major (and related areas, as appropriate) through experiences that are cumulative and integrative, that include individual or collaborative reflective components, and that provide an opportunity to communicate, both orally and in writing, at a level expected of a college graduate.

- **Learning outcomes:** The UCC encourages participation by any department in the university because the acceptability of courses for the core depends on learning outcomes, as well as course content.

**Writing Proficiency Program.** All baccalaureate students must satisfy the Writing Proficiency Requirement prior to graduation.

All WPP courses have as a prerequisite completion of ENG 104 or its equivalent with a grade of “C” or better.

Students who have at least 60 but not more than 89 completed credits may attempt WPP 392 (Writing Proficiency Examination) two times. WPP 392 is a 0 credit course.

Students who have at least 60 completed credits may attempt WPP 394 (Writing Proficiency Seminar). WPP 394 is a 1 credit course, and the credit does apply toward total credits.

Students who have at least 60 completed credits may choose to take WPP 393 (Writing Proficiency Course). WPP 393 is a 2-credit course, and the credits do apply toward total credits. WPP393 may also be used to satisfy the Core Curriculum’s “W” or Writing Intensive Course requirement.

Students with baccalaureate degrees from accredited institutions who are pursuing a second baccalaureate degree from BSU are exempt from the Writing Proficiency Requirement. Students who have satisfied the Writing Proficiency requirement after receiving a passing grade in one WPP course may not attempt another WPP course in order to supplement their grade total.

**FOUNDATIONS**

One course required from each category except two courses are required for Written Communication:

**Written Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 103</td>
<td>Rhetoric and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 104</td>
<td>Composing Research</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 114</td>
<td>Composing Research (Honors</td>
<td>3</td>
</tr>
<tr>
<td>College)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal:** 6

ENG 101 and ENG 102 substitute for ENG 103.

**Oral Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 210</td>
<td>Fundamentals of Public</td>
<td>3</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
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</tbody>
</table>

**Subtotal:** 3

**Mathematics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 161</td>
<td>Applied Calculus 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
<td>4</td>
</tr>
<tr>
<td>MATH 207</td>
<td>Mathematics for the Teacher of the Exceptional Learner</td>
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<td><strong>Subtotal:</strong></td>
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<tr>
<td>History</td>
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<tr>
<td>HIST 150</td>
<td>The West in the World</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 151</td>
<td>World Civilization 1</td>
<td>3</td>
</tr>
<tr>
<td>and HIST 152</td>
<td>World Civilization 2</td>
<td>3</td>
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<td><strong>Subtotal:</strong></td>
<td>3-6</td>
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<tr>
<td>Physical Wellness</td>
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<tr>
<td>PFW 100</td>
<td>Physical Conditioning</td>
<td>2</td>
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<tr>
<td>PFW 101</td>
<td>Physical Fitness and Wellness Activity</td>
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</tr>
<tr>
<td>PFW 102</td>
<td>Physical Fitness and Wellness Lecture</td>
<td>1</td>
</tr>
<tr>
<td>PFW 103</td>
<td>Walking</td>
<td>2</td>
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<tr>
<td>PFW 104</td>
<td>Jogging</td>
<td>2</td>
</tr>
<tr>
<td>PFW 105</td>
<td>Adapted Physical Fitness and Wellness</td>
<td>2</td>
</tr>
<tr>
<td>PFW 117</td>
<td>Aqua Fitness</td>
<td>2</td>
</tr>
<tr>
<td>PFW 148</td>
<td>Group Fitness</td>
<td>2</td>
</tr>
<tr>
<td>PFW 160</td>
<td>Physical Fitness and Wellness</td>
<td>2</td>
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<tr>
<td>PFW 161</td>
<td>Physical Fitness and Wellness Activity</td>
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<td>PFW 162</td>
<td>Physical Fitness and Wellness Lecture</td>
<td>1</td>
</tr>
<tr>
<td>PFW 217</td>
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<td>Personal Finance</td>
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<td>FIN 101</td>
<td>Personal Finance for Fiscal Wellness</td>
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<td>FIN 110</td>
<td>Personal Finance</td>
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<td>1-3</td>
<td></td>
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<tr>
<td>TIER 1 DOMAIN</td>
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</tbody>
</table>

One course required from each category:

Fine Arts
AHS 100 Introduction to Art 3

Humanities
ANTH 103 Archaeology and Culture 3
ANTH 111 Anthropology of Everyday Life 3
AR 102 Beginning Arabic 2 5
AR 201 Intermediate Arabic 1 4
AR 202 Intermediate Arabic 2 4
CC 101 Word Origins and Vocabulary Development 3
CC 105 Introduction to the Classical World 3
CH 102 Beginning Chinese 2 4
CH 201 Intermediate Chinese 1 4
CH 202 Intermediate Chinese 2 4
ENG 206 Reading Literature 3
ENG 213 Introduction to Digital Literacies 3
ENG 220 Language and Society 3
FR 102 Beginning French 2 4
FR 201 Intermediate French 1 3
FR 202 Intermediate French 2 3
GEOG 121 Geography of the Cultural Environment 3
GER 102 Beginning German 2 4
GER 201 Intermediate German 1 3
GER 202 Intermediate German 2 3
HIST 201 American History, 1492-1876 3
HIST 202 United States History, 1877 to the Present 3
HONR 201 Inquiries in the Ancient World 3
JAPA 102 Beginning Japanese 2 4
JAPA 201 Intermediate Japanese 1 3
JAPA 202 Intermediate Japanese 2 4
JOUR 101 Media and Society 3
LAT 102 Beginning Latin 2 3
LAT 201 Intermediate Latin 1 3

Subtotal: 3
<table>
<thead>
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<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAT 202</td>
<td>Intermediate Latin 2</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>RELS 110</td>
<td>World Religions</td>
<td>3</td>
</tr>
<tr>
<td>RELS 160</td>
<td>Religion in Culture</td>
<td>3</td>
</tr>
<tr>
<td>SP 102</td>
<td>Beginning Spanish 2</td>
<td>4</td>
</tr>
<tr>
<td>SP 201</td>
<td>Intermediate Spanish 1</td>
<td>3</td>
</tr>
<tr>
<td>SP 202</td>
<td>Intermediate Spanish 2</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 100</td>
<td>The Entertainment Media</td>
<td>3</td>
</tr>
<tr>
<td>LAT 201</td>
<td>Intermediate Latin 1</td>
<td>3</td>
</tr>
<tr>
<td>RELS 160</td>
<td>Religion in Culture</td>
<td>3</td>
</tr>
<tr>
<td>SP 102</td>
<td>Beginning Spanish 2</td>
<td>4</td>
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<tr>
<td>SP 201</td>
<td>Intermediate Spanish 1</td>
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<tr>
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<td>The Entertainment Media</td>
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**Subtotal: 3-5**

### Natural Sciences

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANTH 105</td>
<td>Introduction to Biological Anthropology</td>
<td>3</td>
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<tr>
<td>ASTR 100</td>
<td>Introductory Astronomy: A Study of the Solar System and Beyond</td>
<td>3</td>
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### TIER 2

One course required from each of 2 categories:

#### Fine Arts/Design/Humanities

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**TIER 3 COURSE/EXPERIENCE**

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Writing

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<tr>
<td>PHIL 230</td>
<td>Environmental Ethics</td>
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<tr>
<td>PHIL 235</td>
<td>Bioethics</td>
<td>3</td>
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<tr>
<td>PHIL 240</td>
<td>Society, Discipline, and Control</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 304</td>
<td>Philosophy of Sport</td>
<td>3</td>
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<tr>
<td>PHIL 415</td>
<td>Topics in Neurophilosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 482</td>
<td>Independent Studies in Physics</td>
<td>1 TO 3</td>
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<tr>
<td>PLAN 220</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
<tr>
<td>POLS 281</td>
<td>Economic and Political Problems of Emerging Nations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 312</td>
<td>Early Western Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLS 313</td>
<td>Modern Western Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLS 344</td>
<td>Advanced Legal Research and Writing</td>
<td>3</td>
</tr>
<tr>
<td>POLS 432</td>
<td>The Presidency</td>
<td>3</td>
</tr>
<tr>
<td>POLS 482</td>
<td>Government and Politics of Western Europe</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 284</td>
<td>Research Methods in Psychological Science</td>
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<tr>
<td>RELS 201</td>
<td>Religion and Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>RELS 206</td>
<td>Sex and the Bible</td>
<td>3</td>
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<tr>
<td>RELS 208</td>
<td>The Qur'an</td>
<td>3</td>
</tr>
<tr>
<td>RELS 210</td>
<td>Religion, Morality, and Public Debate</td>
<td>3</td>
</tr>
<tr>
<td>RELS 275</td>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>RELS 285</td>
<td>Religious Diversity in the United States</td>
<td>3</td>
</tr>
<tr>
<td>RELS 400</td>
<td>Immersive or Experiential Learning</td>
<td>3</td>
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<tr>
<td>SCI 396</td>
<td>Using Science Methods and Materials</td>
<td>3</td>
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<tr>
<td>SOC 380</td>
<td>Sociological Research Methods</td>
<td>3</td>
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<tr>
<td>SOCW 250</td>
<td>Human Behavior and the Social Environment</td>
<td>3</td>
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<tr>
<td>SP 302</td>
<td>Composition and Grammar</td>
<td>3</td>
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<td>SP 306</td>
<td>Composition for Heritage Speakers</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 345</td>
<td>Sport Communication</td>
<td>3</td>
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<tr>
<td>TCOM 346</td>
<td>Sales and Promotion Writing</td>
<td>3</td>
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<tr>
<td>THEA 317</td>
<td>Pre-Modern Theatre History to 1700</td>
<td>3</td>
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<tr>
<td>WGS 410</td>
<td>Feminist Theory</td>
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<tr>
<td>WPP 393</td>
<td>Writing Proficiency Course</td>
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</tbody>
</table>

Subtotal: 3-5
# Course Prefixes and Numbers

Course prefixes used at Ball State University, in alphabetical order, are as follows:

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>Accounting</td>
</tr>
<tr>
<td>ACE</td>
<td>Athletic coaching education</td>
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<tr>
<td>ACR</td>
<td>Art: crafts</td>
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<tr>
<td>ADS</td>
<td>Art: design</td>
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<tr>
<td>AED</td>
<td>Art: education</td>
</tr>
<tr>
<td>AFA</td>
<td>Art: fine arts</td>
</tr>
<tr>
<td>AFAM</td>
<td>African American studies</td>
</tr>
<tr>
<td>AFR</td>
<td>African studies</td>
</tr>
<tr>
<td>AHS</td>
<td>Art: history</td>
</tr>
<tr>
<td>AHSC</td>
<td>Allied health science</td>
</tr>
<tr>
<td>AMST</td>
<td>American studies</td>
</tr>
<tr>
<td>ANAT</td>
<td>Anatomy</td>
</tr>
<tr>
<td>ANTH</td>
<td>Anthropology</td>
</tr>
<tr>
<td>APHY</td>
<td>Applied physics</td>
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<tr>
<td>AQUA</td>
<td>Aquatics</td>
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<td>AR</td>
<td>Arabic</td>
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<td>ARCH</td>
<td>Architecture</td>
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<td>ART</td>
<td>Art</td>
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<td>ASIA</td>
<td>Asian studies</td>
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<tr>
<td>ASTR</td>
<td>Astronomy</td>
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<tr>
<td>AT</td>
<td>Athletic training</td>
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<td>BA</td>
<td>Business analytics</td>
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<td>BED</td>
<td>Business education</td>
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<td>BIO</td>
<td>Biology</td>
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<tr>
<td>BIOT</td>
<td>Biotechnology</td>
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<tr>
<td>BL</td>
<td>Business law</td>
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<tr>
<td>BOT</td>
<td>Botany</td>
</tr>
<tr>
<td>BUSA</td>
<td>Business administration</td>
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<tr>
<td>CANS</td>
<td>Canadian studies</td>
</tr>
<tr>
<td>CAP</td>
<td>College: architecture and planning</td>
</tr>
<tr>
<td>CC</td>
<td>Classical culture</td>
</tr>
<tr>
<td>CCIM</td>
<td>College: communication, information, and media</td>
</tr>
<tr>
<td>CFA</td>
<td>College: fine arts</td>
</tr>
<tr>
<td>CH</td>
<td>Chinese</td>
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<tr>
<td>CHEM</td>
<td>Chemistry</td>
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<tr>
<td>CIS</td>
<td>Computer information systems</td>
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<tr>
<td>CJC</td>
<td>Criminal justice and criminology</td>
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<tr>
<td>CM</td>
<td>Construction management</td>
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<tr>
<td>COMM</td>
<td>Communication studies</td>
</tr>
<tr>
<td>CPSY</td>
<td>Counseling psychology</td>
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<tr>
<td>CRPR</td>
<td>Creative project</td>
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<tr>
<td>CS</td>
<td>Computer science</td>
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<tr>
<td>CSHU</td>
<td>College: sciences and humanities</td>
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<tr>
<td>CT</td>
<td>Computer technology</td>
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<tr>
<td>CTE</td>
<td>Career and technical education</td>
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<tr>
<td>DANC</td>
<td>Dance</td>
</tr>
<tr>
<td>DISS</td>
<td>Doctor's dissertation</td>
</tr>
<tr>
<td>DOC</td>
<td>Doctoral candidate</td>
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<tr>
<td>ECON</td>
<td>Economics</td>
</tr>
<tr>
<td>ECYF</td>
<td>Early childhood, youth, and family studies</td>
</tr>
<tr>
<td>EDAC</td>
<td>Education: adult and community</td>
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<tr>
<td>EDAD</td>
<td>Education: administration</td>
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<tr>
<td>EDAL</td>
<td>Education: all-grade</td>
</tr>
<tr>
<td>EDCC</td>
<td>Education: community college</td>
</tr>
<tr>
<td>EDCU</td>
<td>Education: curriculum</td>
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<tr>
<td>EDEL</td>
<td>Education: elementary</td>
</tr>
<tr>
<td>EDFO</td>
<td>Education: foundations</td>
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<tr>
<td>EDGE</td>
<td>Education: general</td>
</tr>
<tr>
<td>EDHI</td>
<td>Education: higher</td>
</tr>
<tr>
<td>EDJH</td>
<td>Education: junior high/middle school</td>
</tr>
<tr>
<td>EDMU</td>
<td>Education: multicultural</td>
</tr>
<tr>
<td>EDPS</td>
<td>Educational psychology</td>
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<tr>
<td>EDRD</td>
<td>Education: reading</td>
</tr>
<tr>
<td>EDSE</td>
<td>Education: secondary</td>
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<tr>
<td>EDST</td>
<td>Education: studies</td>
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<tr>
<td>EDSU</td>
<td>Education: supervision</td>
</tr>
<tr>
<td>EDTE</td>
<td>Education: technology</td>
</tr>
<tr>
<td>EMDD</td>
<td>Emerging media design and development</td>
</tr>
<tr>
<td>EMHS</td>
<td>Emergency management and homeland security</td>
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<tr>
<td>ENEF</td>
<td>English as a foreign language</td>
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<tr>
<td>ENG</td>
<td>English</td>
</tr>
<tr>
<td>ENIE</td>
<td>English: intensive English institute</td>
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<tr>
<td>ENT</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>EURO</td>
<td>European studies</td>
</tr>
<tr>
<td>EXSC</td>
<td>Exercise science</td>
</tr>
<tr>
<td>FASH</td>
<td>Fashion</td>
</tr>
<tr>
<td>FCFC</td>
<td>Family and consumer sciences: family and child</td>
</tr>
<tr>
<td>FCED</td>
<td>Family and consumer sciences: education</td>
</tr>
</tbody>
</table>
FCGI Family and consumer sciences: general
FCS Family and consumer sciences
FIN Finance
FL Foreign languages
FR French
GCM Graphic Communications Management
GEOG Geography
GEOL Geology
GER German
GERO Gerontology
HIST History
HONR Honors
HOSP Hospitality and food management
HSC Health science
ICOM Icommunication
ICS Information and communication sciences
ID Interdepartmental
IDES Interior Design
IEI Intensive English Institute
INAD Internship: fashion apparel design
INFM Internship: fashion merchandising
INTB International business administration
INSA International study abroad
INTS International study abroad
IS International studies
ISOM Information systems and operations management
ITAL Italian
JAPA Japanese
JOUR Journalism
KINE Kinesiology
LA Landscape architecture
LAS Latin-American studies
LAT Latin
LSCM Logistics and supply chain management
MAST Master’s candidate
MATH Mathematical sciences
MBA Master of business administration
MEDIT Medical technology
METC Meteorology and climatology
MGT Management
MIL Military science
MKG Marketing
MMP Music media production
MUHI Music history and musicology
MUSC School of Music
MUSE Music education
MUSP Music performance
MUST Music theory and composition
NEWS News
NREM Natural resources and environmental management
NSE National student exchange
NUR Nursing
NUTR Nutrition
PEP Physical education: professional
PFW Physical fitness/wellness
PHIL Philosophy
PHYC Physics
PHYS Physiology
PLAN Urban planning
PMGT Residential property management
POLP Political science
PR Public relations
PS Performance studies
PSYS Psychological science
RE Real estate
RELS Religious studies
RES Research paper
RMI Risk management and insurance
SCI Science
SNLN Sign language
SOC Sociology
SOCW Social work
SOPS Social psychology
SP Spanish
SPAA Speech pathology and audiology
SPCE Special education
SPST Sports studies
SPTA Sport administration
SS Social studies
SUST Sustainability
TCOM Telecommunications
TDPT Technology: department
TEDU Technology: education
THEA Theatre
THES Thesis
TPRE Technology preparation
UD Urban design
VBC Virginia Ball center
WELN Wellness
WGS Women’s and gender studies
WPP Writing proficiency program
WWIN Workplace wellness interdisciplinary
ZOOL Zoology
Courses at Ball State are identified by prefix and course number. Course numbers are categorized as follows:
Courses numbered below 100 are not offered for credit toward graduation.
Courses numbered from 100 to 199 are primarily freshman courses.
Courses numbered from 200 to 299 are primarily sophomore courses.
Courses numbered from 300 to 399 are primarily junior courses.
Courses numbered from 400 to 499 are primarily senior courses.
Courses numbered 500 and higher are graduate courses.
In course descriptions, the course number is immediately after the prefix. If a number in parentheses follows, it is the most recent former number of the course.
A student who earns credit in a course under any other number may not earn credit in it under its current number except under the terms of course repetition. It is the responsibility of the student to not duplicate courses.
The number in parentheses after the descriptive title of the course is the credit value of the course. It shows the specific total number of credits that can be earned in the course unless another statement in the description permits earning a greater number of credits. The credits may also be listed as a range (for example, 1-5, which means a student can earn up to 5 credits in the course); or as two possibilities (for example, 3 or 6, which means a student can earn either 3 or 6 credits in the course).
Prerequisite refers to a course or courses or other requirements that must be satisfied before the described course.
Parallel indicates a course or courses that must be taken at the same time as the described course.
Prerequisite recommended indicates a course that is not required but would provide additional preparation for the course described.
Interdepartmental Programs

Today’s planners and decision makers need the ability to draw upon information from many sources. To give students broad backgrounds in a variety of subjects, interdepartmental programs require courses from more than one department.

AFRICAN AMERICAN STUDIES
The African American Studies minor (AFAM) explores major themes and issues animating African America both historically and contemporaneously. It also invests students with a better understanding of the ways that race and racial discrimination are and have been operative in American society. This minor helps students engage more meaningfully with issues of diversity, which, given the growing racial and ethnic heterogeneity of American society, is a crucial career skill in virtually any field.

For more information, call the Department of English at 765-285-8580.

MINOR IN AFRICAN AMERICAN STUDIES

15 CREDITS
In order to complete the minor, students will complete at least fifteen (15) credits within the minor. Three courses (nine credits) are required of all minors. They are:

Requirements List
AFAM 100 Introduction to African-American Studies 3
AFAM 200 African-American Studies Theory and Research Methods 3
AFAM 400 African-American Studies Capstone 3

Students may satisfy their remaining credit requirements by taking six credits (two courses) from any combination of the following courses:
ARCH 407 Fourth World Theory 3
CJC 211 Race, Gender, and Crime 3
COMM 322 Communication and Popular Culture 3
COMM 385 Rhetoric of Marginalized Voices 3
ENG 215 Introduction to African-American Literature 3
ENG 491 Literature of African-American Traditions 3
HIST 210 Introduction to Black History 3
HIST 405 Pre-Civil War America, 1800-1848 3
HIST 407 American Civil War and Reconstruction, 1848-1877 3
HIST 416 Pre-Civil War South, 1776-1861 3
HIST 441 Comparative Slavery 3
POLS 475 Minority Group Politics 3
PSYS 325 Psychology of Prejudice and Discrimination 3
SOC 221 Introduction to Race and Ethnic Relations 3
SOC 333 Sociology of Media 3
SOC 421 Racial and Cultural Minorities in the United States 3
TCOM 363 Film Genres 3

Subtotal: 6

This selection of courses allows students to acquire meaningful engagement with African American history and culture, while also allowing them the flexibility to tailor the minor toward their own major interests.

Subtotal: 15

ANCIENT STUDIES
The minor in Ancient Studies combines required and elective courses in anthropology, classics, history, and philosophy.

For more information, call the Department of History at 765-285-8700 or see https://www.bsu.edu/academics/collegesanddepartments/history/academic-programs/minors/ancient-studies

MINOR IN ANCIENT STUDIES (LIBERAL ARTS)

20 CREDITS

Required Courses:
ANTH 103 Archaeology and Culture 3
CC 105 Introduction to the Classical World 3
HIST 151 World Civilization 1 3
PHIL 300 History of Ancient Philosophy 3

8 credits from
ANTH 310 Topics in Old World Prehistory 3 TO
ANTH 490 Independent Study in Anthropology 1 TO
CC 201 Cultural Life of Ancient Greece 3
CC 202 Cultural Life of Ancient Rome 3
CC 301  Classical Literature in English Translation  3 TO 6
CC 304  The Ancient City  3
CC 305  Classical Myth and Theory  3
HIST 450  Reading and Special Study  1 TO 3
HIST 461  Development of Greek Civilization  3
HIST 462  Development of Roman Civilization  3
HIST 464  Development of Byzantine Civilization  3
PHIL 403  Reading and Special Study  1 TO 6

Subtotal: 8

ASIAN STUDIES

The Asian studies minor is designed to introduce students to the Asian world and traditions and to help them become familiar with diversity in Asian customs and values. This minor equips them with knowledge for careers and citizenship in a global environment.

For more information, call Dr. Sadatoshi Tomizawa at 765-285-1382.

MINOR IN ASIAN STUDIES

15-17 CREDITS

15-17 credits from

AHS 290  Asian Art  3
ASIA 400  Study Abroad  3 TO 9
CH 101  Beginning Chinese 1  4
CH 102  Beginning Chinese 2  4
or
JAPA 101  Beginning Japanese 1  4
JAPA 102  Beginning Japanese 2  4
GEOG 354  Geography of Asia  3
HIST 370  Foundations of Asian Civilization  3
HIST 371  Tradition, Conflict, and Change in Modern Asia  3
HIST 493  History of Pre-modern East Asia  3
HIST 495  Modern China, 1600 to the Present  3
HIST 496  Modern Japan, 1600 to the Present  3
POLS 394  International Relations in Asia  3
POLS 488  Government and Politics of China  3
POLS 495  Foreign Policy of China  3
RELS 290  Hinduism  3
RELS 390  Buddhism  3

Subtotal: 15-17
Credit in only one language (CH or JAPA) and only two courses in any single department counts toward the minor.

ENERGY

This minor is for students interested in how humans provide energy for different purposes from scales as small as household use through larger scales such as industrial processes. The minor provides opportunities for students to study traditional forms of energy, e.g., coal and petroleum as well as innovations in energy production through renewable forms of energy, such as solar or wind energy. Students can choose courses from different academic departments to fulfill the requirements for the minor.

For further information, contact the Department of Natural Resources and Environmental Management, WQ 110, 765-285-5780, or Center for Energy Research/Education/Service, AB 018, 765-285-1135.

EUROPEAN STUDIES

The European studies minor is an interdisciplinary approach to the study of political, social, economic, geographic, and cultural issues faced by Europe. Defining Europe in its broadest geographical sense, from the Atlantic to the Urals, the European studies minor draws together a variety of courses from a number of departments to offer students a broad view of the challenges Europe faces in the twenty-first century. The framework of the European studies minor is formulated so that students will emerge with enhanced knowledge and skills appropriate for careers in education, business, and government, as well as any other profession that values in-depth knowledge of the European continent and its inhabitants.

For more information, call the Office of European Studies, housed in the Department of Political Science, NQ 258, 765-285-8780.

MINOR IN EUROPEAN STUDIES

18 CREDITS

Proficiency required in a continental European language by passing three semesters or the equivalent of study in one contemporary language, normally through the 201 level. By taking a placement exam, the student may begin at a level higher than the 101 level. The chairperson of the Department of Modern Languages and Classics will determine language equivalency in consultation with the European studies program director.

Required Courses:

GEOG 357  Geography of Europe  3
Approved electives
9 credits chosen from the following electives, no more than two elective courses (3 credits each) from any department
ENG 205  World Literature 3
ENG 497  Studies: Literature in Translation 3
EURO 369  Professional Experience 3
EURO 401  Special Issues in European Studies 3
EURO 405  Independent Study 3
EURO 479  Practical Experience 3
FL 307  European Women Writers 3
FL 308  European Culture through Films 3
GEOG 356  Geography of Russia and Its Neighbors 3
HIST 454  The Era of World War I, 1870-1918 3
HIST 455  The Era of World War II, 1918-1945 3
HIST 487  Soviet and Post-Soviet History 3
PHIL 306  Contemporary Philosophy 3
POLS 313  Modern Western Political Thought 3
POLS 385  Politics of the European Union 3
POLS 486  Politics of Russia and the Successor States 3

Subtotal: 9

In exceptional circumstances courses not in the approved electives list may be substituted to complete the minor with the advance permission of the European studies program director. European content may vary significantly with the instructor and/or the semester; the student’s enrollment for European studies credit is contingent on the European studies director’s review of the course syllabus and approval for ANTH 370, ENG 205, ENG 497 and PHIL 306.

INTERNATIONAL STUDIES
For more information, contact John W. Jensen, Director of Study Abroad
Rinker Center for International Programs, Ball State University, Pittenger Student Center, Room 102, Muncie, IN 47306 USA

MINOR IN INTERNATIONAL STUDIES
16-17 CREDITS
Required Courses
IS 400  Capstone in International Studies 1

15-16 credits from
AHS 100  Introduction to Art 3
ANTH 101  Introduction to Cultural Anthropology 3
ANTH 111  Anthropology of Everyday Life 3
CC 205  Mythologies of the World 3
COMM 290  Intercultural Communication 3
EDEL 244  Early and Elementary Education for Social Justice 3
ENT 241  The Entrepreneurial Experience 3
HIST 151  World Civilization 1 3
HIST 152  World Civilization 2 3
HIST 198  Studies in Non-Western Civilizations 3
HIST 324  Topics in Latin American History 3
HIST 370  Foundations of Asian Civilization 3
HIST 371  Tradition, Conflict, and Change in Modern Asia 3
HIST 372  Africa Since 1500 3
HIST 373  History of the Middle East 3
HIST 426  Topics in African History 3
HIST 427  Topics in Asian History 3
HIST 452  Women in Modern European History 3
HIST 456  Europe Since 1945 3
HIST 471  France Since 1789 3
HIST 476  Britain, 1670 to the Present 3
HIST 481  Modern Germany 3
HIST 483  Irish History 3
HIST 484  Southern Africa 3
HIST 487  Soviet and Post-Soviet History 3
HIST 491  Topics in Middle Eastern History 3
HIST 493  History of Pre-modern East Asia 3
HIST 495  Modern China, 1600 to the Present 3
HIST 496  Modern Japan, 1600 to the Present 3
HONR 189  Inquiries in Global Studies 3
INTB 265  Introduction to International Business 3
MUHI 100  Introduction to Music 3
NREM 205  International Natural Resources: Development and Conservation 3
NREM 307  Environmental Management in Developing Countries 3
NREM 309  Human Dimensions of Global 3
Change

NREM 357 International Community Development 3
PHIL 310 African Philosophy 3
POLS 280 Comparative Political Systems 3
POLS 290 American Foreign Policy 3
POLS 293 International Relations 3
POLS 313 Modern Western Political Thought 3
POLS 384 Politics in the British Isles 3
POLS 385 Politics of the European Union 3
POLS 392 The United Nations and International Organization 3
POLS 394 International Relations in Asia 3
POLS 395 Politics of the Global Economy 3
POLS 482 Government and Politics of Western Europe 3
POLS 486 Politics of Russia and the Successor States 3
RELS 290 Hinduism 3
RELS 390 Buddhism 3
SOC 221 Introduction to Race and Ethnic Relations 3
SOC 328 Globalization and the Social World 3
THEA 317 Pre-Modern Theatre History to 1700 3
Any foreign language course in CH, FR, GER, JAPA, or SP 3-4

Subtotal: 15-16

Subtotal: 16-17

No courses in any major or another minor may count in this minor. Any course in Chinese, French, German, Japanese, or Spanish not used in a major or minor may be used to meet requirements in this minor, except that no more than one class from each language may be used.

LEGAL STUDIES

Ball State offers a legal studies major for bachelor’s degree students. The legal studies major is a paralegal education program approved by the American Bar Association. Paralegals, as members of the legal services team, work under the supervision of a lawyer. A paralegal may not provide legal services directly to the public, except as permitted by law. The program provides a strong foundation in law-related courses for students who plan to work in the courts, the legislature, or in legal departments of government and business. Students must complete an internship in a professional legal setting. The course of study is also highly recommended for students who wish to attend law school, providing them with skills and resources that will enhance their chances for success. In addition to other university requirements, transfer students must complete at least four of their legal specialty classes of three credits each at Ball State as approved by the program director.

For more information, call the Department of Political Science at 765-285-8780.

MAJOR IN LEGAL STUDIES (BA/BS)

69-72 credits

This major prepares students for careers as legal assistants or paralegals. It also provides a strong foundation in law-related courses for students who plan to work in the courts, the legislature or in legal departments of government and business.

INTERDISCIPLINARY MAJOR REQUIREMENTS

Common core, 36 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL 367</td>
<td>Principles of Estate Planning</td>
<td>3</td>
</tr>
<tr>
<td>POLS 130</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 141</td>
<td>Introduction to Legal Studies</td>
<td>3</td>
</tr>
<tr>
<td>POLS 241</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>POLS 242</td>
<td>Legal Research and Writing</td>
<td>3</td>
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<tr>
<td>POLS 243</td>
<td>Litigation</td>
<td>3</td>
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<tr>
<td>POLS 320</td>
<td>Tort Law</td>
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<tr>
<td>POLS 344</td>
<td>Advanced Legal Research and Writing</td>
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<tr>
<td>POLS 445</td>
<td>Advanced Litigation and Alternative Dispute Resolution</td>
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Subtotal: 27

3 credits from

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<tr>
<td>POLS 250</td>
<td>Access to Justice in the Legal System</td>
<td>3</td>
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<tr>
<td>POLS 455</td>
<td>Administrative Law</td>
<td>3</td>
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Subtotal: 3

3 credits from

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<tr>
<td>POLS 479</td>
<td>Practical Experience in Law</td>
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<tr>
<td>POLS 480</td>
<td>Access to Justice Clinic</td>
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Subtotal: 3

3 credits from

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<tr>
<td>POLS 342</td>
<td>Problems in Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 431</td>
<td>Congress</td>
<td>3</td>
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</table>

Subtotal: 3
Subtotal: 36

**COMPLETE ONE CONCENTRATION**

**Concentration 1: Public Law, 33 credits**
- ACC 201 Principles of Accounting 1
- BL 260 Principles of Business Law
- POLS 433 The Judiciary
- RMI 270 Principles of Risk Management and Insurance

15 credits from
- COMM 340 Leadership Communication
- COMM 385 Rhetoric of Marginalized Voices
- POLS 237 State and Local Politics
- POLS 238 Urban Government in the United States
- POLS 347 Environmental Law and Policy
- POLS 408 Topics in Legal Studies
- POLS 435 Intergovernmental Conflict and Cooperation
- POLS 443 American Constitutional Law
- POLS 444 Constitutional Liberties
- POLS 474 Women and Politics
- POLS 475 Minority Group Politics
- POLS 490 International Law
- PSYS 471 Psychology in the Legal System
- RMI 330 Employee Benefits and Retirement Planning
- SOC 221 Introduction to Race and Ethnic Relations
- SOC 235 Sociology of Gender
- SOC 320 Social Inequality
- SOC 421 Racial and Cultural Minorities in the United States
- SOC 425 Sociology of Law
- SOCW 100 Introduction to Social Work

Subtotal: 15

**Concentration 2: Business Law, 36 credits**
Students interested in pursuing this concentration must complete the following courses before registering for 300- and 400-level business courses.

6 credits from
- ACC 202 Principles of Accounting 2
- CJC 101 Introduction to American Criminal Justice System
- COMM 220 Argumentation and Debate
- COMM 320 Persuasion
- COMM 325 Interviewing
- ECON 201 Elementary Microeconomics
- PHIL 200 Symbolic Logic
- PSYS 100 Introduction to Psychological Science
- RMI 473 Insurance Law
- SOC 100 Principles of Sociology

Subtotal: 69

**Subtotal: 69**
### Real Estate Principles 
RE 230  3

### Real Estate Construction Law and Finance 
RE 331  3

### Principles of Risk Management and Insurance 
RMI 270  3

### Employee Benefits and Retirement Planning 
RMI 330  3

### Insurance Law 
RMI 473  3

### Sociology of Law 
SOC 425  3

**Subtotal: 72**

The prerequisite for ISOM 210 is C or better grade in ISOM 125. ECON 221 requires C or better grade in MATH 111, or a passing grade (D- or better) in MATH 132, 161, 162, 165, or 166 and a C or higher grade in ISOM 125 as the prerequisite.

**MATHEMATICAL ECONOMICS**

This major helps students understand the mathematical basis of economics. The program prepares students for careers as economic analysts and for rigorous graduate work. This major also facilitates a double major in either mathematical economics and actuarial science or mathematical economics and mathematical sciences. 

For more information, contact the Department of Economics, WB 201, 765-285-5360, or visit the department Web site at [www.bsu.edu/economics](http://www.bsu.edu/economics).

**MAJOR IN MATHEMATICAL ECONOMICS (BS)**

**52-55 CREDITS**

**Required Courses**

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<tr>
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<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
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<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Intermediate Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 321</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
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<tr>
<td>MATH 215</td>
<td>Discrete Systems</td>
<td>4</td>
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<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
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<tr>
<td>MATH 259</td>
<td>Introduction to Actuarial Software</td>
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**9 credits from**

ECON from 300- and 400-level must include

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<th>Credits</th>
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<tr>
<td>ECON 421</td>
<td>Mathematical Economics</td>
<td>3</td>
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<tr>
<td>or</td>
<td>Introduction to Econometrics</td>
<td>3</td>
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</table>

**Subtotal: 9**

6-7 credits from

<table>
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<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 267</td>
<td>Calculus 3</td>
<td>4</td>
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<tr>
<td>MATH 320</td>
<td>Probability</td>
<td>4</td>
</tr>
<tr>
<td>MATH 335</td>
<td>Mathematical Models</td>
<td>3</td>
</tr>
<tr>
<td>MATH 351</td>
<td>Mathematics of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MATH 462</td>
<td>Numerical Analysis 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 363</td>
<td>Numerical Analysis 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 374</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 422</td>
<td>Theory of Sampling and Surveys</td>
<td>3</td>
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<tr>
<td>MATH 428</td>
<td>Regression and Time Series Models</td>
<td>3</td>
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<td>MATH 429</td>
<td>Analysis of Variance in Experimental Design Models</td>
<td>3</td>
</tr>
<tr>
<td>MATH 454</td>
<td>Statistics for Risk Modeling</td>
<td>4</td>
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<tr>
<td>MATH 456</td>
<td>Introduction to Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 457</td>
<td>Short-Term Actuarial Mathematics</td>
<td>4</td>
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<tr>
<td>MATH 465</td>
<td>Topics in Computational Mathematics</td>
<td>1 TO 6</td>
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<tr>
<td>MATH 470</td>
<td>Intermediate Analysis</td>
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<td>MATH 471</td>
<td>Real Analysis 1</td>
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**Subtotal: 6-7**

3-4 credits from

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<td>Calculus 3</td>
<td>4</td>
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<tr>
<td>MATH 320</td>
<td>Probability</td>
<td>4</td>
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<tr>
<td>MATH 321</td>
<td>Mathematical Statistics</td>
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<tr>
<td>MATH 335</td>
<td>Mathematical Models</td>
<td>3</td>
</tr>
<tr>
<td>MATH 351</td>
<td>Mathematics of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MATH 363</td>
<td>Numerical Analysis 1</td>
<td>3</td>
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<tr>
<td>MATH 364</td>
<td>Numerical Analysis 2</td>
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<td>MATH 374</td>
<td>Differential Equations</td>
<td>3</td>
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<td>MATH 422</td>
<td>Theory of Sampling and Surveys</td>
<td>3</td>
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<tr>
<td>MATH 428</td>
<td>Regression and Time Series Models</td>
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<td>MATH 429</td>
<td>Analysis of Variance in Experimental Design Models</td>
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<td>MATH 454</td>
<td>Statistics for Risk Modeling</td>
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<tr>
<td>MATH 457</td>
<td>Short-Term Actuarial Mathematics</td>
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</table>
INTERDEPARTMENTAL PROGRAMS

MATH 465  Topics in Computational Mathematics  1 TO 6
MATH 470  Intermediate Analysis  3
MATH 471  Real Analysis 1  3

Subtotal: 3-4

Subtotal: 52-55
MATH 161 Applied Calculus 1 (3) and 162 Applied Calculus 2 (3) may substitute for MATH 165 and 166 along with another 2 credits of MATH from the approved electives to complete the 52-credit total requirement. All mathematical economics majors will be required to take the Major Field Test in Economics before graduation.

MEDALLION SCHOLAR
An Honors College student with excellent academic credentials may design a fully individualized, highly mentored program of study that entails substantial freedom in the completion of program requirements. The program should be organized around a theme or themes, may combine course work from any departments, and may not replicate any existing major. Admission requires written application to the director (Dean of the Honors College) and must be approved and monitored by a faculty review committee; student must maintain a minimum grade-point average of 3.33 or higher and complete a minimum of 55 credits in the program of study; at least 45 credits must be at the 300-level or higher, including at least 6 credits at the 400-level or higher.

For more information call the Honors College at 765-285-1024 or go to www.bsu.edu/honors/medallion.

NATIVE AMERICAN STUDIES
This minor is a comprehensive study of Native Americans. It supplements programs in the social sciences and those requiring a multicultural component.

MINOR IN NATIVE AMERICAN STUDIES
18 CREDITS
Admissions suspended.

PEACE STUDIES AND CONFLICT RESOLUTION
The interdisciplinary peace studies and conflict resolution minor addresses the sources of oppression and violence and the challenges of promoting cooperative and peaceful relationships and social justice on international, national, domestic, and personal levels. It examines proposals that introduce more equitable and nonviolent methods to transform unjust, violent, or oppressive situations. It also teaches strategies such as mediation and conflict resolution to promote redress of grievances.

For more information, contact the Center for Peace and Conflict Studies by phone 765-285-1622, e-mail peacecenter@bsu.edu, or online at www.bsu.edu/peacecenter.

MINOR IN PEACE STUDIES AND CONFLICT RESOLUTION
18 CREDITS
Required Courses
ID 301  Introduction to Peace Studies and Conflict Resolution  3
COMM 442  Communication and Conflict Management  3
or
GEOG 270  Geography of International Conflict  3
Group 1, Peace studies, 3 credits from
GEOG 470  Political Geography  3
HIST 215  Women in American History  3
HIST 452  Women in Modern European History  3
RELS 160  Religion in Culture  3
RELS 380  Religion, Non-Violence and War  3
SOC 242  Social Problems  3

Subtotal: 3
Group 2, Conflict management, 3 credits from
JOUR 101  Media and Society  3
NREM 101  Environment and Society  3
PHIL 230  Environmental Ethics  3
POLS 293  International Relations  3
POLS 392  The United Nations and International Organization  3
SOCW 310  Social Work Practice 2  3
SOCW 410  Social Work Practice 3  3

Subtotal: 3
Group 3, Multiculturalism, 3 credits from
ANTH 311  Ethnicity and Race  3
COMM 290  Intercultural Communication  3
CPSY 470  Introduction to Cross-Cultural Counseling  3
EDMU 205  Introduction to Multicultural Education  3
EDMU 206  Advanced Study of Ethnic and Multicultural Group Behavior  3
ENG 491  Literature of African-American  3
Traditions

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HIST 210</td>
<td>Introduction to Black History</td>
<td>3</td>
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<tr>
<td>HIST 371</td>
<td>Tradition, Conflict, and Change in Modern Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 373</td>
<td>History of the Middle East</td>
<td>3</td>
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<tr>
<td>POLS 281</td>
<td>Economic and Political Problems of Emerging Nations</td>
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<td>POLS 475</td>
<td>Minority Group Politics</td>
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**Subtotal: 3**

3 additional credits

3 additional credits from groups 1, 2 or 3; or ID 399 Independent Study in Peace Studies and Conflict Resolution (3 credits), ID 401 Internship in Peace Studies and Conflict Resolution (3 credits), or a 3 credit course from outside the curriculum with approval from director of Center for Peace and Conflict Studies.

**Subtotal: 3**

Subtotal: 18

**REAL ESTATE DEVELOPMENT**

The real estate development minor is an interdisciplinary approach to the development and redevelopment of land and from its perspectives as a profitable business as well as an instrument for the public interest and the development of sustainable community. The core instills an understanding of the development process, and its demanding analysis of the market, means of financing, and applicable public regulation. The process requires knowledge of site evaluation and control, the formulation and implementation of an architectural program, lease-up or sale, and the management of the asset during its holding period. The process serves the end users or consumers, the public, and the investors. The application is for a variety of land uses and locations, including inner city and infill development, and leads to career roles as an enterprising developer in all three economic sectors: for-profit, nonprofit, and public. The combination of land uses and real estate roles constitute a range of areas of specialized interest that is addressed through electives. Many courses are field-based and present “hands-on” experiences that constitute experiential, service, or immersive learning. Many courses present online Internet distance learning opportunities. Facilitated by this minor are careers in land development and redevelopment, its financing, marketing, construction and property management, and in structuring public-private partnerships.

For more information, call the Department of Urban Planning at 765-285-1963.

**MINOR IN REAL ESTATE DEVELOPMENT**

**25 CREDITS**

**Required Courses**

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<tr>
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<td>PLAN 240</td>
<td>Planning and Private Development</td>
<td>3</td>
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<tr>
<td>PLAN 303</td>
<td>Economic Development Studio</td>
<td>4</td>
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<tr>
<td>RE 230</td>
<td>Real Estate Principles</td>
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Capstone: 3 credits from

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<tr>
<td>CM 460</td>
<td>Capstone in Construction</td>
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<tr>
<td>PLAN 490</td>
<td>Independent Study in Planning</td>
<td>1 TO 9</td>
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<tr>
<td>PLAN 498</td>
<td>Special Projects in Urban Planning and Development</td>
<td>3 TO 9</td>
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<tr>
<td>PMGT 400</td>
<td>Housing and Society</td>
<td>3</td>
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<tr>
<td>TEDU 490</td>
<td>Study in Technology</td>
<td>1 TO 3</td>
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**Subtotal: 3**

Electives

12 credits from any of the following areas

**Business Administration and Real Estate Law**

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<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
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<tr>
<td>ACC 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
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<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
<td>3</td>
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<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
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<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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<td>PLAN 452</td>
<td>Urban Planning Law</td>
<td>3</td>
</tr>
<tr>
<td>RE 331</td>
<td>Real Estate Construction Law and Finance</td>
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**Subtotal: 12**

**Community Development**

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<tr>
<td>PLAN 430</td>
<td>Housing and Community Development</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 453</td>
<td>Center City Revitalization</td>
<td>3</td>
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<tr>
<td>PLAN 465</td>
<td>Community Development and the Faith Based Initiative</td>
<td>3</td>
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<td>PLAN 485</td>
<td>Introduction to Community Development and Enterprise Planning</td>
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<tr>
<td>PLAN 486</td>
<td>Methods of Public Interest Development</td>
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<tr>
<td>PLAN 498</td>
<td>Special Projects in Urban Planning and Development</td>
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**Subtotal: 12**

**Construction**

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<td>CM 180</td>
<td>Construction Documents</td>
<td>3</td>
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<td>CM 200</td>
<td>Site Preparation</td>
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### Interdepartmental Programs

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<tbody>
<tr>
<td>CM 320</td>
<td>Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CM 365</td>
<td>Construction Safety</td>
<td>3</td>
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<tr>
<td>CM 400</td>
<td>Construction Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CM 420</td>
<td>Construction Finance and Law</td>
<td>3</td>
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**Subtotal: 12**

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>CM 252</td>
<td>Building Diagnostics</td>
<td>3</td>
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<td>PLAN 411</td>
<td>Property Law</td>
<td>1</td>
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<tr>
<td>PLAN 430</td>
<td>Housing and Community Development</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 440</td>
<td>Building Performance</td>
<td>3</td>
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<tr>
<td>PLAN 441</td>
<td>Sustainable Housing</td>
<td>3</td>
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<td>PMGT 104</td>
<td>Housing Decisions</td>
<td>3</td>
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<tr>
<td>PMGT 235</td>
<td>Introduction to Residential Property Management</td>
<td>3</td>
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<tr>
<td>PMGT 305</td>
<td>Maintenance for Property Managers</td>
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<tr>
<td>PMGT 315</td>
<td>Senior Housing: Design, Marketing, and Management</td>
<td>3</td>
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<tr>
<td>PMGT 405</td>
<td>Management of Government-Assisted Housing</td>
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**Subtotal: 12**

<table>
<thead>
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<th>Course Title</th>
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<tr>
<td>ENT 241</td>
<td>The Entrepreneurial Experience</td>
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<tr>
<td>ENT 341</td>
<td>Opportunity Identification</td>
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<td>ENT 346</td>
<td>Product and Service Design</td>
<td>3</td>
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<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
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**Management**

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>PLAN 421</td>
<td>Urban Land-use Planning</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 439</td>
<td>Community Facilities Planning</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 452</td>
<td>Urban Planning Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

The capstone requirement may be fulfilled through any independent study course with the approval of the Real Estate Development program’s academic advisor and coordinator. All independent study courses and variable-title courses such as PLAN 498 must be cleared with RED program advisor to be certain they qualify toward the minor. Urban planning and development majors are strongly advised to take their electives outside of their major.
The Estopinal College of Architecture and Planning (CAP) offers degree programs in architecture, construction management, environmental design (architecture), historic preservation, interior design, landscape architecture, urban design, and urban planning and development. All programs are fully accredited by their respective professional accrediting agencies. Professional graduate degrees in architecture, historic preservation, landscape architecture, and urban and regional planning are also available for students with undergraduate degrees in fields other than design and planning.

Admission Requirements
Entry-level students in architecture, landscape architecture and urban planning must complete a supplemental application process and secure admission into CAP’s Common First Year Program. Required courses in the first year provide a foundation in theories and skills pertinent to all three disciplines. For more information about the CAP supplemental admission process, please log on to bsu.edu/admissions.

Those students entering the Interior Design program are not required to submit an application to the College. However, Interior Design students are placed in the Pre-Interior Design program for the first two years. Approval to pursue the Interior Design concentration requires the submission of portfolio during spring semester of sophomore year.

Those students declaring a major in Construction Management are admitted directly into the Construction Management program and are not required to submit an application to the College.

Pre-Declaration
Students in good academic standing who wish to pursue a career in landscape architecture or urban planning and development and have completed a minimum of 30 college credits may be admitted directly into these two degree programs by means of a special “Pre-Declaration Entry” track. For more information please contact the dean’s office.

Enrollment Management Plan
During their first year, CAP students have opportunities to meet with faculty and professional advisors to discuss career and curriculum options in all of the college’s degree programs.

Admission into the second year at CAP is subject to departmental enrollment review, and established departmental retention standards Each department has instituted an enrollment management plan. In the event that the number of students who declare an interest in one of the majors exceeds one of the departmental enrollment limits, students may not be able to enroll in their preferred major, and may be advised about other available degree programs of the college and the university.

CAP Common First Year Program
CAP 101: Environmental Design and Planning 1
CAP 102: Environmental Design and Planning 2
CAP 161: Design Communications Media 1
CAP 162: Design Communications Media 2
ARCH 100, LA 100, PLAN 100: Intro to Professions
(Each student must take all three.)

Note: All courses of the Common First Year Program must be completed prior to continuation into the second year for Architecture, Landscape Architecture and Urban Planning.

CAP COMMON FIRST YEAR PROGRAM

PROGRAM REQUIREMENTS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 101</td>
<td>Environmental Design and Planning 1</td>
<td>3</td>
</tr>
<tr>
<td>CAP 102</td>
<td>Environmental Design and Planning 2</td>
<td>3</td>
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<tr>
<td>CAP 161</td>
<td>Design Communications Media 1</td>
<td>2</td>
</tr>
<tr>
<td>CAP 162</td>
<td>Design Communications Media 2</td>
<td>2</td>
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<tr>
<td>ARCH 100</td>
<td>Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>LA 100</td>
<td>Introduction to Landscape Architecture</td>
<td>2</td>
</tr>
<tr>
<td>PLAN 100</td>
<td>Introduction to Urban Planning and Development</td>
<td>2</td>
</tr>
</tbody>
</table>

ARCH 100, LA 100, PLAN 100: Each student must take all three.

Note: All courses of the Common First Year Program must be completed prior to continuation into the second year for Architecture, Landscape Architecture and Urban Planning.

ARCHITECTURE

A. Swartz, Chairperson
bsu.edu/architecture/

Architectural education attends to the critical 21st century environmental and social challenges in our communities while educating students in analytical and creative thinking, intellectual inquiry, ideation, hands-on making, and communication. We seek to inspire our students with the grounding of a rigorous education that fosters the
creative and intellectual confidence, ethical grounding, and self-awareness to allow them to succeed in their disciplinary aspirations in a rapidly changing world. Three undergraduate degree programs in architecture are offered. Each of these is tailored to different student educational pursuits and professional aspirations.

The five-year Bachelor of Architecture program provides a professionally oriented undergraduate education resulting in an accredited professional degree (a necessary requirement for professional licensure). The B.Arch degree balances the intensity of a professional degree program with a broader, well rounded, and diverse undergraduate university education. This B.Arch degree program also provides a foundation for other career paths and/or educational pursuits at the graduate level. This degree program is currently eligible for initial candidacy and accreditation by the National Architectural Accrediting Board. The university expects to host a visit for initial accreditation in Fall 2020. See * below.

The four-year undergraduate degree program Bachelor of Arts (includes a foreign language concentration) or Bachelor of Science (no foreign language concentration) with a major in architecture provide a “pre-professional” undergraduate architecture education. This degree path prepares students to pursue a graduate professional M.Arch degree in architecture (a necessary requirement for professional licensure). This degree is the pre-professional component of the department’s NAAB accredited Master of Architecture degree. Note that the pre-professional degree is not, by itself, recognized as an accredited professional degree. See ** below.

The four-year undergraduate major BS in Environmental Design provides students with an immersive exposure to the discipline of architecture, while preparing them for leadership roles in allied environmental design disciplines. While benefitting from lessons in critical thinking, communication and design process inherent in an architectural education, this degree suits students who have broader educational and career aspirations, perhaps leading to careers (with or without additional graduate education) in the construction industry, interior design, industrial design, business management, communications, marketing, or business, to name a few. This degree does not directly lead to professional licensure as an architect although the three-year professional Master of Architecture program would be an option for students in this track.

Approval to pursue any of the departmental undergraduate degrees involves admission to the university http://cms.bsu.edu/admissions/undergraduate-admissions/information-for/high-school-students and acceptance into the College of Architecture and Planning http://cms.bsu.edu/academics/collegesanddepartments/cap/applications-financial-aid/undergraduate AND admission into the Department of Architecture Department after the first year at CAP.

**Admission Standards**

Portfolio of CAP first year work including design, design communication media work and writing examples (reviewed by committee for admission)

A minimum cumulative GPA of 2.75 overall in the CAP first-year courses

Note: transfer requests into the undergraduate program are addressed on a case-by-case basis.

**Retention Standards:**

Students in the B.Arch and BA/BS undergraduate degree programs receiving grades BELOW C- in two consecutive Professional Studies (per NAAB) required courses (i.e., ARCH 201, 202; ARCH 214, 314; ARCH 218, 318 etc.), must repeat the sequence of both courses.

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, three-year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may require a pre-professional undergraduate degree in architecture for admission. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a program expects to achieve initial accreditation within six years of achieving candidacy, if its plan is properly implemented.

In order to meet the education requirement set forth by the National Council of Architectural Registration Boards, an applicant for an NCARB Certificate must hold a professional degree in architecture from a program accredited by the NAAB; the degree must have been awarded not more than two years prior to initial accreditation. However, meeting the education requirement for the NCARB Certificate may not be equivalent to meeting the education requirement for registration in a specific jurisdiction. Please contact NCARB for more information.

* Ball State University, Department of Architecture, has achieved Initial Candidacy for the following NAAB-accredited degree program:

  B.Arch (154 undergraduate credits)
Projected visit for Initial Accreditation: Fall 2020
Projected Initial Accreditation: Spring 2021 for prior B.Arch class of 2020

** Ball State University’s Department of Architecture offers the following NAAB-accredited degree programs:
- M.Arch (pre-professional degree + 48 graduate credits)
- M.Arch (non-pre-professional degree + 106 credits)

Next accreditation visit for both programs: 2021

Approval to pursue any of the departmental graduate degrees involves admission to the university’s Graduate School as well as admission to the department.

https://www.bsu.edu/academics/collegesanddepartments/architecture/academic-programs/masters/architecture

### BACHELOR OF ARCHITECTURE

#### 109 CREDITS

**Admission requirements**
Portfolio of CAP first year work including design, design communication media work and writing examples; a minimum GPA of 2.75 overall in the CAP first-year courses; transfer requests are addressed on a case-by-case basis.

**Retention standards**
Students in the B.Arch and BA/BS undergraduate degree programs receiving grades below C- in two consecutive Professional Studies (per NAAB) required courses (i.e., ARCH 201, 202; ARCH 214, 314; ARCH 218, 318; ARCH 229, 329, etc.) must repeat the sequence of both courses.

**Degree requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 201</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 202</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 214</td>
<td>Architectural Building Technology 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 218</td>
<td>Structural Systems 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 229</td>
<td>History of Architecture 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 251</td>
<td>Introduction to Social and Environmental Justice in Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 263</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 273</td>
<td>Environmental Systems 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 301</td>
<td>Architectural Design</td>
<td>5</td>
</tr>
<tr>
<td>ARCH 302</td>
<td>Architectural Design</td>
<td>5</td>
</tr>
<tr>
<td>ARCH 314</td>
<td>Architectural Building Technology 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 318</td>
<td>Structural Systems 2</td>
<td>3</td>
</tr>
</tbody>
</table>

12 credits from electives in ARCH, PLAN, LA, and CAP (excludes required courses in the professional curriculum, University Core Curriculum courses, and general electives)

**Subtotal: 12**

Subtotal: 109

Students are required to complete a minimum of 14 consecutive weeks of a non-credit internship in either the fall or the spring semester of their fourth year.

### MAJOR IN ARCHITECTURE (BA/BS)

#### 87 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
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<td>ARCH 201</td>
<td>Architectural Design</td>
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<td>ARCH 202</td>
<td>Architectural Design</td>
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<tr>
<td>ARCH 214</td>
<td>Architectural Building Technology 2</td>
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</table>
66 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
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<td>ARCH 201</td>
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<td>ARCH 202</td>
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<td>ARCH 214</td>
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<td>ARCH 218</td>
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<tr>
<td>ARCH 229</td>
<td>History of Architecture 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 263</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 261</td>
<td>Design Communications Media 1</td>
<td>3</td>
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<td>ARCH 273</td>
<td>Environmental Systems 1</td>
<td>3</td>
</tr>
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<td>5</td>
</tr>
<tr>
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<td>5</td>
</tr>
<tr>
<td>ARCH 314</td>
<td>Architectural Building Technology 2</td>
<td>3</td>
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<tr>
<td>ARCH 318</td>
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<tr>
<td>ARCH 329</td>
<td>History of Architecture 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 340</td>
<td>Introduction to Historic Preservation for Architects</td>
<td>3</td>
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<tr>
<td>ARCH 373</td>
<td>Environmental Systems 2</td>
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<td>ARCH 401</td>
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<td>ARCH 402</td>
<td>Architectural Design</td>
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<tr>
<td>ARCH 320</td>
<td>Introduction to Professional Practice</td>
<td>3</td>
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<tr>
<td>CAP 101</td>
<td>Environmental Design and Planning 1</td>
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</tr>
<tr>
<td>CAP 102</td>
<td>Environmental Design and Planning 2</td>
<td>3</td>
</tr>
<tr>
<td>CAP 161</td>
<td>Design Communications Media 1</td>
<td>2</td>
</tr>
<tr>
<td>CAP 162</td>
<td>Design Communications Media 2</td>
<td>2</td>
</tr>
<tr>
<td>LA 100</td>
<td>Introduction to Landscape Architecture</td>
<td>2</td>
</tr>
<tr>
<td>PLAN 100</td>
<td>Introduction to Urban Planning and Development</td>
<td>2</td>
</tr>
</tbody>
</table>

15 credits from electives in ARCH, CAP, LA, PLAN, NREM, or other departments with permission of the architecture department chairperson

Subtotal: 75

Subtotal: 15

Not open to architecture majors.

MINOR IN HISTORIC PRESERVATION

Admission Requirements

1. Minimum sophomore standing at BSU
2. Minimum 3.0 GPA

Students with a GPA of 2.99 to 2.76 must have minimum sophomore standing at BSU and be admitted by HP director based upon the following:
1. 1-page statement of interest
2. 2 letters of recommendation by current or past instructor
3. Admission by HP director

Students with a GPA of 2.75 or below will not be granted admission into the minor.

15 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 340</td>
<td>Introduction to Historic Preservation for Architects</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 21

Not open to environmental design majors.

MAJOR IN ENVIRONMENTAL DESIGN (BA/BS)

66 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>Environmental Design and Planning 1</td>
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<td>CAP 102</td>
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<td>3</td>
</tr>
<tr>
<td>CAP 161</td>
<td>Design Communications Media 1</td>
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</tr>
<tr>
<td>CAP 162</td>
<td>Design Communications Media 2</td>
<td>2</td>
</tr>
<tr>
<td>LA 100</td>
<td>Introduction to Landscape Architecture</td>
<td>2</td>
</tr>
<tr>
<td>PLAN 100</td>
<td>Introduction to Urban Planning and Development</td>
<td>2</td>
</tr>
</tbody>
</table>

15 credits from electives in ARCH, CAP, LA, PLAN, NREM, or other departments with permission of the architecture department chairperson

Subtotal: 66

Not open to architecture majors.
or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 440</td>
<td>Introduction to Preservation</td>
<td>3</td>
</tr>
</tbody>
</table>

Design History, 3 credits from the list below that are not required for your major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 229</td>
<td>History of Architecture 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 329</td>
<td>History of Architecture 2</td>
<td>3</td>
</tr>
<tr>
<td>IDES 210</td>
<td>Historical and Theoretical Studies 1</td>
<td>3</td>
</tr>
<tr>
<td>IDES 225</td>
<td>Historical and Theoretical Studies 2</td>
<td>3</td>
</tr>
<tr>
<td>LA 220</td>
<td>Landscape Architecture History - Ancient to Mid-19th Century</td>
<td>3</td>
</tr>
<tr>
<td>LA 221</td>
<td>Landscape Architecture History - Mid-19th Century to Recent Past</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 220</td>
<td>History and Theory of Planning 1</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 221</td>
<td>History and Theory of Planning 2</td>
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</tbody>
</table>

**Preservation Content Areas, select 9 credits from**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARCH 441</td>
<td>Preservation Policy</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 447</td>
<td>Preservation Technology</td>
<td>3</td>
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<tr>
<td>ARCH 473</td>
<td>Current Issues in Preservation</td>
<td>3</td>
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<tr>
<td>HIST 240</td>
<td>Introduction to Public History</td>
<td>3</td>
</tr>
<tr>
<td>LA 420</td>
<td>Historic Landscape Preservation</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 450</td>
<td>Neighborhood Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

**MINOR IN SOCIAL AND ENVIRONMENTAL JUSTICE**

**OPEN ONLY TO MAJORS IN ARCHITECTURE.**

Social and environmental justice minors may not double count any course taken in any other major or minor.

6 credits from (including at least one ARCH course)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 407</td>
<td>Fourth World Theory</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 408</td>
<td>Architects of Hope</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 490</td>
<td>Independent Project</td>
<td>1 TO</td>
</tr>
<tr>
<td>ARCH 498</td>
<td>Special Project in Architecture</td>
<td>3 TO</td>
</tr>
<tr>
<td>LA 490</td>
<td>Independent Projects</td>
<td>1 TO</td>
</tr>
<tr>
<td>LA 498</td>
<td>Special Projects in Landscape Architecture</td>
<td>1 TO</td>
</tr>
<tr>
<td>PLAN 490</td>
<td>Independent Study in Planning</td>
<td>1 TO</td>
</tr>
<tr>
<td>PLAN 498</td>
<td>Special Projects in Urban Planning and Development</td>
<td>3 TO</td>
</tr>
<tr>
<td>CAP 498</td>
<td>Special Projects in College of Architecture and Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

**MINOR IN SOCIAL AND ENVIRONMENTAL JUSTICE**

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<tr>
<td>PLAN 490</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>WGS 210</td>
<td>Introduction to Women’s and Gender Studies</td>
<td>3</td>
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<tr>
<td>ARCH 251</td>
<td>Introduction to Social and Environmental Justice in Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 407</td>
<td>Fourth World Theory</td>
<td>3</td>
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<tr>
<td>ARCH 408</td>
<td>Architects of Hope</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 429</td>
<td>Application of Cultural Issues to Design and Planning Strategies</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 490</td>
<td>Independent Project</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>ARCH 498</td>
<td>Special Project in Architecture</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>LA 490</td>
<td>Independent Projects</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>LA 498</td>
<td>Special Projects in Landscape Architecture</td>
<td>1 TO 6</td>
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<tr>
<td>PLAN 490</td>
<td>Independent Study in Planning</td>
<td>1 TO 9</td>
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<td>Special Projects in Urban Planning and Development</td>
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<td>CAP 498</td>
<td>Special Projects in College of Architecture and Planning</td>
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<tr>
<td>WGS 210</td>
<td>Introduction to Women’s and Gender Studies</td>
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<tr>
<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
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<td>GEOG 150</td>
<td>Global Geography</td>
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<td>HIST 198</td>
<td>Studies in Non-Western Civilizations</td>
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<td>HIST 370</td>
<td>Foundations of Asian Civilization</td>
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<td>NREM 101</td>
<td>Environment and Society</td>
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<tr>
<td>NREM 205</td>
<td>International Natural Resources: Development and Conservation</td>
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<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHIL 102</td>
<td>Introduction to Techniques of Critical Reasoning</td>
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<td>Ethics</td>
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<td>Social Philosophy</td>
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<td>Psychology of Prejudice and Discrimination</td>
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<td>SOC 100</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 328</td>
<td>Globalization and the Social World</td>
<td>3</td>
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<td>SOC 421</td>
<td>Racial and Cultural Minorities in the United States</td>
<td>3</td>
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<tr>
<td>WGS 210</td>
<td>Introduction to Women’s and Gender Studies</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 9

**OPEN ONLY TO STUDENTS NOT MAJORING IN ARCHITECTURE.**

Subtotal: 15

**CONSTRUCTION MANAGEMENT AND INTERIOR DESIGN**

J. Jones, Chairperson

The Department of Construction Management and Interior Design prepares graduates for careers in designing and building the environments in which we live, work, and play. Majors in the fields of construction management and interior design are offered through accredited programs that prepare graduates for careers in these disciplines. Minors are offered to prepare majors in allied fields to collaborate with these disciplines.

The major in construction management may be taken as either a Bachelor of Arts (BA) or Bachelor of Science (BS) degree, both of which are accredited by the American Council for Construction Education. Coursework includes technical and managerial aspects that combine theory with hands-on learning approaches. Students complete a specialized minor in business administration and two
internships in the industry, and have the opportunity to enroll in a variety of specialized technical electives. Graduates go on to assume positions in a variety of fields, including commercial, industrial, institutional, heavy/highway, and residential construction. The minor in construction management offers students in other disciplines, particularly design and business, the opportunity to enhance their degree with the knowledge and skills for building a variety of projects. Majors in interior design may elect to take either the Bachelor of Arts (BA) or Bachelor of Science (BS) degree, both of which are accredited by the Council for Interior Design Accreditation. The curriculum includes 18 credit hours of graphic communication, 18 credit hours of design studios, and an internship in the industry. Graduates are prepared for careers in a variety of settings such as commercial, health care, hospitality (restaurant and hotel), and store planning. All interior design students are required to participate in a portfolio review during the second semester of the first year to be admitted to the 200-level courses and higher. The minor in interior design offers students in other majors the opportunity to enhance their design, space planning, and aesthetics skills as they relate to the interior of the built environment. Admission to the interior design minor is competitive and limited to five students per year. A separate application is required.

MAJOR IN CONSTRUCTION MANAGEMENT (BA/BS)
Students preparing for management positions in the field of construction will complete the program below with a required minor in business administration. This prepares graduates to become project managers, estimators, project planners, technical trainers, CAD technicians, safety officers, site superintendents, product marketing representatives, and purchasers. Two required internship experiences provide students with relevant work experience in the field of construction.

96 CREDITS
Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 104</td>
<td>Introduction to Construction</td>
<td>3</td>
</tr>
<tr>
<td>CM 106</td>
<td>CAD for Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CM 180</td>
<td>Construction Documents</td>
<td>3</td>
</tr>
<tr>
<td>CM 200</td>
<td>Site Preparation</td>
<td>3</td>
</tr>
<tr>
<td>CM 222</td>
<td>Technical Presentation for Construction Managers</td>
<td>3</td>
</tr>
<tr>
<td>CM 250</td>
<td>Construction Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>CM 261</td>
<td>Mechanical Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CM 262</td>
<td>Electrical Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CM 300</td>
<td>Structural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CM 310</td>
<td>Ethics in Construction</td>
<td>3</td>
</tr>
<tr>
<td>CM 320</td>
<td>Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CM 355</td>
<td>Planning and Scheduling</td>
<td>3</td>
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<tr>
<td>CM 365</td>
<td>Construction Safety</td>
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<tr>
<td>CM 380</td>
<td>Internship in Construction Management</td>
<td>3</td>
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<tr>
<td>CM 400</td>
<td>Construction Project Management</td>
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<tr>
<td>CM 420</td>
<td>Construction Finance and Law</td>
<td>3</td>
</tr>
<tr>
<td>CM 460</td>
<td>Capstone in Construction</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
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<tr>
<td>MATH 181</td>
<td>Elementary Probability and Statistics</td>
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<tr>
<td>NREM 221</td>
<td>Soil Resources</td>
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<td>NREM 211</td>
<td>Water Resources</td>
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<tr>
<td>PHYC 110</td>
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<td>PHYC 112</td>
<td>General Physics 2</td>
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<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
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<td>CM 206</td>
<td>Building Information Modeling (BIM) for Construction Management</td>
<td>3</td>
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<tr>
<td>CM 280</td>
<td>Construction Specifications for Construction Management</td>
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<tr>
<td>CM 299X</td>
<td>Special Topics in Construction Management</td>
<td>1 TO</td>
</tr>
<tr>
<td>CM 302</td>
<td>Highway Construction 1</td>
<td>3</td>
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<tr>
<td>CM 315</td>
<td>Sustainable Construction</td>
<td>3</td>
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<tr>
<td>CM 490</td>
<td>Independent Study in Construction Management</td>
<td>1 TO</td>
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</table>

Subtotal: 81

The prerequisite for MATH 132 is a C- or better in MATH 111, or an appropriate score on the SAT/ACT or on the mathematics placement test, or permission of the
department chairperson. The prerequisite for ECON 221 is a C or better grade in MATH 111, or a passing grade (D or better) in MATH 132, 161, 162, 165, or 166 and a C or higher grade in ISOM 125. Other prerequisites may be necessary for MATH 111.

CHEM 111, ECON 201, MATH 132, PHYC 110, and CM 460 are required as part of the University Core Curriculum. Students may elect to take MATH 112, 125, and one additional science course (PHYC 112 or CHEM 112) instead of taking MATH 132 to meet accreditation, university, and program requirements. This election may take more than 120 credits for graduation.

Minor in Business Administration for Construction Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 251</td>
<td>Introductory Operations Management</td>
<td>3</td>
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<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
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<tr>
<td></td>
<td>Business elective</td>
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Subtotal: 15

Students may choose the business elective from ACC 202; ECON 202; RE 230; RMI 270; ENT 241, MGT 261; or other business elective as approved by the construction management student advisor.

Subtotal: 96

MAJOR IN INTERIOR DESIGN (BA/BS)

87 CREDITS

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>AHS 100</td>
<td>Introduction to Art</td>
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<tr>
<td>IDES 100</td>
<td>Introduction to Interior Design</td>
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<tr>
<td>IDES 101</td>
<td>Rapid Visualization</td>
<td>3</td>
</tr>
<tr>
<td>IDES 110</td>
<td>Design Fundamentals</td>
<td>3</td>
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<tr>
<td>IDES 111</td>
<td>Graphic Communication 1</td>
<td>3</td>
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<td>IDES 112</td>
<td>Design Presentation Techniques</td>
<td>3</td>
</tr>
<tr>
<td>IDES 114</td>
<td>Sustainable Interiors</td>
<td>3</td>
</tr>
<tr>
<td>IDES 115</td>
<td>Interior Materials and Applications</td>
<td>3</td>
</tr>
<tr>
<td>IDES 120</td>
<td>Graphic Communication 2</td>
<td>3</td>
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<tr>
<td>IDES 210</td>
<td>Historical and Theoretical Studies 1</td>
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<td>IDES 221</td>
<td>Graphic Communication 3</td>
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<td>IDES 222</td>
<td>Interior Design Studio 1</td>
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<td>IDES 224</td>
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<td>IDES 261</td>
<td>Universal Design</td>
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<td>IDES 300</td>
<td>Interior Design Professional Practice</td>
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<td>IDES 310</td>
<td>Construction Management for Interior Design</td>
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<td>IDES 314</td>
<td>Color and Light in Interior Design</td>
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<td>IDES 320</td>
<td>Furniture Design</td>
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<td>IDES 324</td>
<td>Interior Design Studio 3</td>
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<td>IDES 330</td>
<td>Construction Documents for Interior Designers</td>
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<td>Interior Design Studio 4</td>
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<td>Interior Construction, Building Systems, and Regulations</td>
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<td>Internship in Interior Design</td>
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<td>IDES 400</td>
<td>NCIDQ Preparation</td>
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<td>IDES 420</td>
<td>Interior Design Programming</td>
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<td>ACR 221</td>
<td>Metals: Introduction</td>
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<td>ACR 231</td>
<td>Glass: Introduction</td>
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<td>AFA 101</td>
<td>Drawing Studio</td>
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<tr>
<td>ARCH 100</td>
<td>Introduction to Architecture</td>
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<tr>
<td>ARCH 329</td>
<td>History of Architecture 2</td>
<td>3</td>
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<tr>
<td>CM 104</td>
<td>Introduction to Construction</td>
<td>3</td>
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<tr>
<td>CM 180</td>
<td>Construction Documents</td>
<td>3</td>
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<tr>
<td>CM 250</td>
<td>Construction Methods and Materials 1</td>
<td>3</td>
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<tr>
<td>CM 299X</td>
<td>Special Topics in Construction Management</td>
<td>1 TO 9</td>
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<tr>
<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
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<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 6

Entry-level students in interior design must complete a supplemental application process and secure admission into the Pre-Interior Design Program. For more information about the supplemental admission process, please log on to bsu.edu/admissions. Interior Design students are placed in the Pre-Interior Design program for the first year. Approval to pursue the Interior Design major requires the submission of a portfolio during spring semester of freshman year.
Students are required to complete an exit survey prior to graduation. Students may not progress through the program until they satisfy the requirements.

Subtotal: 87

MINOR IN BUSINESS ADMINISTRATION FOR CONSTRUCTION MANAGEMENT

15 CREDITS

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
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<td>ISOM 251</td>
<td>Introductory Operations Management</td>
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<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
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Subtotal: 15

Students may choose the business elective from ACC 202; ECON 202; RE 230; RMI 270; ENT 241, ENT 261; or other business elective as approved by the construction management student advisor.

Open only to construction management majors to meet the requirements for accreditation by the American Council of Construction Education. ACCE standards require specific courses in law, accounting, management, and economics.

MINOR IN CONSTRUCTION MANAGEMENT

18 CREDITS

Construction Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CM 104</td>
<td>Introduction to Construction</td>
<td>3</td>
</tr>
<tr>
<td>CM 180</td>
<td>Construction Documents</td>
<td>3</td>
</tr>
<tr>
<td>CM 320</td>
<td>Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CM 355</td>
<td>Planning and Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>CM 400</td>
<td>Construction Project Management</td>
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Subtotal: 15

3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CM 106</td>
<td>CAD for Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CM 200</td>
<td>Site Preparation</td>
<td>3</td>
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<tr>
<td>CM 250</td>
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</tr>
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<td>CM 280</td>
<td>Construction Specifications for Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CM 300</td>
<td>Structural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CM 310</td>
<td>Ethics in Construction</td>
<td>3</td>
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<tr>
<td>CM 315</td>
<td>Sustainable Construction</td>
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<tr>
<td>CM 365</td>
<td>Construction Safety</td>
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Subtotal: 3

Total Credit Hours: 18

MINOR IN INTERIOR DESIGN

24 CREDITS

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CAP 162</td>
<td>Design Communications Media 2</td>
<td>2</td>
</tr>
<tr>
<td>IDES 101</td>
<td>Rapid Visualization</td>
<td>3</td>
</tr>
<tr>
<td>IDES 110</td>
<td>Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CAP 102</td>
<td>Environmental Design and Planning 2</td>
<td>3</td>
</tr>
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<td>IDES 111</td>
<td>Graphic Communication 1</td>
<td>3</td>
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<tr>
<td>IDES 115</td>
<td>Interior Materials and Applications</td>
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<td>IDES 222</td>
<td>Interior Design Studio 1</td>
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</tr>
<tr>
<td>ARCH 201</td>
<td>Architectural Design</td>
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Subtotal: 15

Choose 9 additional credits from the following:

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<th>Course</th>
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</thead>
<tbody>
<tr>
<td>IDES 112</td>
<td>Design Presentation Techniques</td>
<td>3</td>
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<tr>
<td>IDES 114</td>
<td>Sustainable Interiors</td>
<td>3</td>
</tr>
<tr>
<td>IDES 120</td>
<td>Graphic Communication 2</td>
<td>3</td>
</tr>
<tr>
<td>IDES 210</td>
<td>Historical and Theoretical Studies 1</td>
<td>3</td>
</tr>
<tr>
<td>IDES 221</td>
<td>Graphic Communication 3</td>
<td>3</td>
</tr>
<tr>
<td>IDES 224</td>
<td>Interior Design Studio 2</td>
<td>3</td>
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<tr>
<td>IDES 225</td>
<td>Historical and Theoretical Studies 2</td>
<td>3</td>
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<td>IDES 228</td>
<td>Graphic Communication 4</td>
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<td>IDES 261</td>
<td>Universal Design</td>
<td>3</td>
</tr>
<tr>
<td>IDES 314</td>
<td>Color and Light in Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>IDES 320</td>
<td>Furniture Design</td>
<td>3</td>
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<td>IDES 324</td>
<td>Interior Design Studio 3</td>
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</tr>
<tr>
<td>IDES 362</td>
<td>Interior Construction, Building Systems, and Regulations</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

Students completing this minor must receive C or better grades in all interior design courses. Students receiving a grade lower than C are required to retake the course.
Total Credit Hours: 24

LANDSCAPE ARCHITECTURE

M. Hunt, Chairperson
bsu.edu/landscape

Landscape architecture involves applying functional and aesthetic principles to the planning, design, preservation, and management of the land. In response to social and environmental problems related to public health, welfare and safety, landscape architects combine and coordinate skills and understanding of the arts, ecology, sciences, planning, engineering, and human behavior to arrange spaces and amenities while preserving and/or restoring natural systems within the landscape for use and enjoyment. Ball State University’s undergraduate program in landscape architecture is fully accredited by the Landscape Architectural Accreditation Board of the American Society of Landscape Architects and has been a nationally ranked program in the USA for over a decade.

MAJOR IN LANDSCAPE ARCHITECTURE (BLA)

121 CREDITS

Admissions Standards
A minimum grade-point average of 2.75 in the College of Architecture and Planning first-year course is required of all undergraduate students applying to the BLA program (or declaring an LA major). For transfer students who do not enroll in CAP courses, a minimum grade-point average of 2.75 must be earned in all prior course equivalents to the CAP first year courses.

Portfolio Requirements: All students requesting admission into the department must submit a portfolio of work and meet the minimum grade point average. The portfolio must include examples of work from all design studios and design communication courses, and a statement of purpose. Other creative work may be included.

Retention Standards
If a student earns below a C- in any required studio or engineering course, the student must retake that course. After the first D+ or below, the student must contact their academic advisor immediately following the receipt of final grades from the university. The academic advisor will work with the student to create a plan for moving toward successful completion of the curriculum. If a student receives a second D+ or below for the same course, this will initiate a departmental process that will determine whether the student is retained or dismissed from the program.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARCH 100  Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>CAP 101  Environmental Design and Planning 1</td>
<td>3</td>
</tr>
<tr>
<td>CAP 102  Environmental Design and Planning 2</td>
<td>3</td>
</tr>
<tr>
<td>CAP 161  Design Communications Media 1</td>
<td>2</td>
</tr>
<tr>
<td>CAP 162  Design Communications Media 2</td>
<td>2</td>
</tr>
<tr>
<td>LA 100  Introduction to Landscape Architecture</td>
<td>2</td>
</tr>
<tr>
<td>LA 201  Site Design</td>
<td>4</td>
</tr>
<tr>
<td>LA 202  Park and Open Space Design</td>
<td>4</td>
</tr>
<tr>
<td>LA 211  Landscape Architectural Engineering 1</td>
<td>4</td>
</tr>
<tr>
<td>LA 214  Field Studies</td>
<td>1</td>
</tr>
<tr>
<td>LA 220  Landscape Architecture History - Ancient to Mid-19th Century</td>
<td>3</td>
</tr>
<tr>
<td>LA 221  Landscape Architecture History - Mid-19th Century to Recent Past</td>
<td>3</td>
</tr>
<tr>
<td>LA 270  Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>LA 280  Computer Applications in Landscape Architecture</td>
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</tr>
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<td>LA 301  Housing and Community Design</td>
<td>5</td>
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<td>LA 302  Planting Design</td>
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<tr>
<td>LA 312  Landscape Architectural Engineering 2</td>
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<tr>
<td>LA 313  Landscape Architectural Engineering 3</td>
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<tr>
<td>LA 341  Landscape Plants 1</td>
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<td>LA 369  Landscape Architecture Internship</td>
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<td>LA 401  Regional Landscape Design</td>
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<td>LA 403  Urban Design</td>
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<td>LA 404  Landscape Architecture Comprehensive Project</td>
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<tr>
<td>LA 414  Landscape Architectural Engineering 4</td>
<td>3</td>
</tr>
<tr>
<td>LA 451  Landscape Architecture Research</td>
<td>3</td>
</tr>
<tr>
<td>LA 460  Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 100  Introduction to Urban Planning and Development</td>
<td>2</td>
</tr>
</tbody>
</table>

9 credits from department electives

Subtotal: 9
have a commitment to improving community life for citizens of all incomes and a broad competence to make both new and old communities better places in which to live.

The four-year Bachelor of Urban Planning and Development degree, which is fully accredited by the Planning Accreditation Board, prepares students for direct entry into and subsequent growth in professional planning careers. Graduates may also pursue advanced degrees in planning or other professional programs.

The Department of Urban Planning will review applications for entry into the program at the end of the student’s first year. Students with a 2.75 GPA or higher and a well-designed portfolio are granted admission with no restrictions. Students with a 2.74 or lower GPA and/or with a substandard portfolio may be granted provisional admission; such students will be required to improve their GPA and demonstrate competence in their course work within the second year. If provisional admission is granted, factors to be considered will include: overall academic performance to date, performance in PLAN 100 and any other planning courses taken to date, a writing sample from PLAN 100, a recommendation from at least one faculty member in a studio or project-based course, or any additional materials or recommendations a student may wish to submit. The entry review process is intended to ensure that students enrolling in the professional degree program have the ability to perform advanced work in the field and a sincere interest in urban planning.

Students should complete BIO 112 to satisfy the prerequisite for BIO 216.

MINOR IN LANDSCAPE ARCHITECTURE

19 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA 100</td>
<td>Introduction to Landscape Architecture</td>
<td>2</td>
</tr>
<tr>
<td>LA 211</td>
<td>Landscape Architectural Engineering 1</td>
<td>4</td>
</tr>
<tr>
<td>LA 220</td>
<td>Landscape Architecture History - Ancient to Mid-19th Century</td>
<td>3</td>
</tr>
<tr>
<td>LA 270</td>
<td>Environmental Systems</td>
<td>3</td>
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<tr>
<td>LA 341</td>
<td>Landscape Plants 1</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal: 3

3 credits from other department courses

Subtotal: 3

MAJOR IN URBAN PLANNING AND DEVELOPMENT (BUPD)

82 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>CAP 101</td>
<td>Environmental Design and Planning 1</td>
<td>3</td>
</tr>
<tr>
<td>CAP 102</td>
<td>Environmental Design and Planning 2</td>
<td>3</td>
</tr>
<tr>
<td>CAP 161</td>
<td>Design Communications Media 1</td>
<td>2</td>
</tr>
<tr>
<td>CAP 162</td>
<td>Design Communications Media 2</td>
<td>2</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 485</td>
<td>Urban Economics or</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 321</td>
<td>Urban Geography</td>
<td>3</td>
</tr>
<tr>
<td>LA 100</td>
<td>Introduction to Landscape Architecture</td>
<td>2</td>
</tr>
</tbody>
</table>
Students are required to complete an internship of three to five months in a professional office with experience involving planning and development.

For a list of all PLAN courses and their descriptions, follow this link. (p. 466)

MINOR IN URBAN PLANNING AND DEVELOPMENT

20 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PLAN 100</td>
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</table>

9 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PLAN 221</td>
<td>History and Theory of Planning 2</td>
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</tr>
<tr>
<td>PLAN 421</td>
<td>Urban Land-use Planning</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 430</td>
<td>Housing and Community Development</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 450</td>
<td>Neighborhood Planning</td>
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</tr>
<tr>
<td>PLAN 452</td>
<td>Urban Planning Law</td>
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</table>

Subtotal: 9

9 credits from approved electives from PLAN

Subtotal: 9

Subtotal: 20

The minor course of study must be approved by the planning department advisor.

ACADEMY OF SUSTAINABILITY

Programs of the Academy for Sustainability provide students with interdisciplinary studies that examine the interactions of social, economic, and environmental factors which challenge our ability to maintain sustainable systems for future generations. These programs help prepare 21st century leaders who apply systems thinking to envision and implement solutions that contribute to the healthy viability of cultures, ecologies, and economies.

For more information contact Dr. Mary Annette Rose, 765-285-5648.

MINOR IN SUSTAINABLE LAND SYSTEMS

24 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 216</td>
<td>Ecology</td>
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<tr>
<td>ECON 311</td>
<td>Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>NREM 203</td>
<td>Decision Making in Natural Resource Management</td>
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</table>

Subtotal: 9

9 credits from electives from PLAN

Subtotal: 3

Subtotal: 82
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LA 471</td>
<td>Sustainable Land Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 230</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>SUST 400</td>
<td>Creating a Sustainable Future</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>9 credits from</strong></td>
<td></td>
</tr>
<tr>
<td>ANTH 312</td>
<td>Ecological Dimensions of Culture</td>
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<tr>
<td>ARCH 498</td>
<td>Special Project in Architecture</td>
<td>3</td>
</tr>
<tr>
<td>BIO 418</td>
<td>Community and Ecosystem Ecology</td>
<td>3</td>
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<tr>
<td>BOT 480</td>
<td>Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 207</td>
<td>Environmental Geology - Geological/Geochemical Cycles</td>
<td>3</td>
</tr>
<tr>
<td>HIST 204</td>
<td>American Environmental History or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NREM 204</td>
<td>3</td>
</tr>
<tr>
<td>LA 270</td>
<td>Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>NREM 205</td>
<td>International Natural Resources: Development and Conservation</td>
<td>3</td>
</tr>
<tr>
<td>NREM 304</td>
<td>Sustainable Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>NREM 357</td>
<td>International Community Development</td>
<td>3</td>
</tr>
<tr>
<td>NREM 405</td>
<td>Integrated Resource Management</td>
<td>3</td>
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<tr>
<td>PLAN 433</td>
<td>Environmental Planning</td>
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<tr>
<td>PLAN 435</td>
<td>Energy Planning</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 460</td>
<td>Alternative and Sustainable Community Planning</td>
<td>3</td>
</tr>
<tr>
<td>POLS 347</td>
<td>Environmental Law and Policy</td>
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<td>ZOOL 483</td>
<td>Wildlife Biology</td>
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Subtotal: 9

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<tbody>
<tr>
<td>SUST 250</td>
<td>Introduction to Sustainable Development</td>
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<tr>
<td>SUST 400</td>
<td>Creating a Sustainable Future</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>1 course from each of the following areas:</strong></td>
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<tr>
<td></td>
<td>Atmosphere and Climate</td>
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<tr>
<td>GEOL 207</td>
<td>Environmental Geology - Geological/Geochemical Cycles</td>
<td>3</td>
</tr>
<tr>
<td>METC 230</td>
<td>Elementary Meteorology</td>
<td>3</td>
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<tr>
<td>METC 331</td>
<td>Global Climatology</td>
<td>3</td>
</tr>
<tr>
<td>METC 332</td>
<td>Climate Change and Modification</td>
<td>3</td>
</tr>
<tr>
<td>NREM 309</td>
<td>Human Dimensions of Global Change</td>
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</tbody>
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Subtotal: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIO 216</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 418</td>
<td>Community and Ecosystem Ecology</td>
<td>3</td>
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<tr>
<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
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<tr>
<td>GEOG 150</td>
<td>Global Geography</td>
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<tr>
<td>GEOL 416</td>
<td>Geology of Hazards and the Environment</td>
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<tr>
<td>LA 471</td>
<td>Sustainable Land Systems</td>
<td>3</td>
</tr>
<tr>
<td>NREM 221</td>
<td>Soil Resources</td>
<td>3</td>
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<tr>
<td>NREM 304</td>
<td>Sustainable Agriculture</td>
<td>3</td>
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<tr>
<td>NREM 427</td>
<td>Soil Conservation and Management</td>
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Subtotal: 3

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<tbody>
<tr>
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<td>Environmental Systems 1</td>
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<tr>
<td>GEOL 206</td>
<td>Oceans and Nations</td>
<td>3</td>
</tr>
<tr>
<td>LA 371</td>
<td>Theories and Practices of Sustainable Site Design</td>
<td>3</td>
</tr>
<tr>
<td>NREM 211</td>
<td>Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>NREM 331</td>
<td>Energy and Mineral Resources: Issues and Choices</td>
<td>3</td>
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<tr>
<td>NREM 335</td>
<td>Renewable Energy and Sustainable Technology</td>
<td>3</td>
</tr>
<tr>
<td>NREM 405</td>
<td>Integrated Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 433</td>
<td>Environmental Planning</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 435</td>
<td>Energy Planning</td>
<td>3</td>
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<tr>
<td>TDPT 203</td>
<td>Material Processing</td>
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<tr>
<td>TDPT 204</td>
<td>Energy Processing</td>
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Subtotal: 3

For further information, contact the Department of Landscape Architecture, AB 226, 765-285-1971. Information or assistance may also be obtained by contacting the Center for Energy Research/Education/Service, AB 018, 765-285-1135.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANTH 312</td>
<td>Socio-Cultural Dimensions of Sustainability</td>
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<tr>
<td>BUSA 300</td>
<td>Introduction to Sustainability in Business</td>
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</tr>
<tr>
<td>ECON 311</td>
<td>Ecological Dimensions of Culture</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 423</td>
<td>Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>HSC 180</td>
<td>Principles of Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HSC 482</td>
<td>Population Geography</td>
<td>3</td>
</tr>
<tr>
<td>NREM 205</td>
<td>International Natural Resources: Development and Conservation</td>
<td>3</td>
</tr>
<tr>
<td>NREM 309</td>
<td>Human Dimensions of Global Change</td>
<td>3</td>
</tr>
<tr>
<td>NREM 357</td>
<td>International Community Development</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 460</td>
<td>Alternative and Sustainable Community Planning</td>
<td>3</td>
</tr>
<tr>
<td>SOC 328</td>
<td>Globalization and the Social World</td>
<td>3</td>
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<tr>
<td>SOC 355</td>
<td>Environmental Sociology</td>
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<tr>
<td>SOC 470</td>
<td>Population Dynamics and Demographic Methods</td>
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<td>SOCW 325</td>
<td>Human Behavior and the Social Environment 2</td>
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**Subtotal: 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HIST 204</td>
<td>American Environmental History</td>
<td>3</td>
</tr>
<tr>
<td>ID 301</td>
<td>Introduction to Peace Studies and Conflict Resolution</td>
<td>3</td>
</tr>
<tr>
<td>NREM 309</td>
<td>Human Dimensions of Global Change</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 230</td>
<td>Environmental Ethics</td>
<td>3</td>
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<tr>
<td>POLS 347</td>
<td>Environmental Law and Policy</td>
<td>3</td>
</tr>
<tr>
<td>TDPT 406</td>
<td>Technological Decision Making</td>
<td>3</td>
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</tbody>
</table>

**Subtotal: 3**

Subtotal: 21
Miller College of Business

S. Ferris, Dean; M. Myring, Associate Dean; S. Sharma, Associate Dean
bsu.edu/cob

Nearly all undergraduate programs in the Miller College of Business are accredited by AACSB International—The Association to Advance Collegiate Schools of Business. The Department of Accounting has earned separate AACSB accreditation. (Majors in apparel design and fashion merchandising, computer technology, hospitality and food management, and residential property management are not currently accredited by AACSB International).

Miller College of Business Majors

The Miller College of Business offers 23 baccalaureate majors. Those that are currently AACSB accredited include: accounting, business administration, business analytics, economics (two concentrations), finance, entrepreneurial management, computer information systems, international business, human resource management, logistics and supply chain management, professional selling, marketing, and risk management and insurance. The business administration major is also available on-line in its entirety. Those majors that are not AACSB accredited include: apparel design and fashion merchandising, computer technology, hospitality and food management, and residential property management. Additionally, an interdepartmental major in mathematical economics and an economics (liberal arts) major are available.

Degree Requirements

A bachelor’s degree in business is awarded to students who meet these university and Miller College of Business requirements. Students must:

• complete a minimum of 120 credits;
• complete all University Core Curriculum requirements;
• complete the specific requirements of the major;
• take 30 of the last 40 credits at Ball State University. In addition to this university requirement, students majoring in a program in the Miller College of Business must earn the last 30 credits of their major in residence; and
• maintain a minimum grade-point average of 2.0.

Transfer of Credit and Transfers from Other Colleges and Universities

Acceptance of credit from other institutions will be determined by the Office of Admissions. The applicability of credit toward degree requirements in the Miller College of Business will be determined by the college.

Courses in upper division business subjects (300/400-level) may be accepted for specific equivalency if the course work has been taken in the junior or senior year at a four-year institution that is accredited by the AACSB. If the institution is not so accredited, credit in upper division courses accepted for transfer will be applicable only if syllabi, course text information, contact hours, and prerequisites are deemed equivalent to Ball State University course requirements. Both ISOM 249 (Foundations of Business Communication) and MGT 491 (Business Policy and Strategic Management) must be taken at Ball State.

Any student enrolling at Ball State University to complete a second undergraduate degree in business will be required to meet the residence requirement for the university. Business courses taken at two-year institutions will not be applied to upper division requirements.

Credit by Self-Acquired Competency

The Miller College of Business does not award credit in business courses on the basis of self-acquired competency. However, the college will give examinations for credit in specific courses. Consult the appropriate department chairperson for information.

Statute of Limitation

If seven or more years have elapsed since last enrollment, the student will be required to meet the degree requirements as stated in the current undergraduate catalog.

Business Minors

The College offers minors in 23 subjects. Note that admission requirements vary by minor.

Note: Some departments have determined that their courses will be open ONLY to business majors or minors.

MILLER COLLEGE OF BUSINESS HONORS CORE CURRICULUM

45 CREDITS

Honors sections of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 249</td>
<td>Foundations of Business</td>
<td>3</td>
</tr>
</tbody>
</table>
MAJOR IN BUSINESS ADMINISTRATION (BA/BS)

72 CREDITS

Miller College of Business core, 45 credits

ACC 201 Principles of Accounting 1 3
ACC 202 Principles of Accounting 2 3
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
ECON 202 Elementary Macroeconomics 3
ECON 221 Business Statistics 3
FIN 300 Principles of Finance 3
ISOM 125 Introduction to Business with Integrated Computer Applications 3
ISOM 210 Business Information Systems 3
ISOM 249 Foundations of Business Communication 3
ISOM 351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Organizations 3
MGT 491 Business Policy and Strategic Management 3
MKG 300 Principles of Marketing 3

Subtotal: 45

Communication

ISOM 351 Operations Management 3
MGT 300 Managing Behavior in Organizations 3
MGT 491 Business Policy and Strategic Management 3
MKG 300 Principles of Marketing 3

General sections of:
BL 260 Principles of Business Law 3
MATH 132 Brief Calculus 3
HONR 499 Senior Honors Project 3

Subtotal: 6

Information Systems and Operations Management, 6 credits from

CIS 456 Information Technology and Business Analytics 3
ISOM 300 Project Management 3
LSCM 355 Quality Management and Lean Six Sigma 3
LSCM 452 Inventory, Warehousing and Negotiations 3
LSCM 453 Manufacturing Planning and Control 3
LSCM 460 Global Logistics and Transportation Management 3

Subtotal: 6

Management and Human Resources, 6 credits from

BUSA 369 Internship in Business Administration 1 TO 3
ECON 331 Labor Economics 3
ENT 241 The Entrepreneurial Experience 3
MGT 361 Foundations of Human Resource Management and Employee Relations 3
MGT 363 Talent Management 3
MGT 365 Employment Law 3
MGT 467 Leadership and Change Management 3
RMI 330 Employee Benefits and Retirement Planning 3

Subtotal: 6

International, 3 credits from

ECON 351 International Economics 3
FIN 352 Global Finance 3
INTB 265 Introduction to International Business 3
MGT 301 International Management 3
MKG 470 International Marketing 3

Subtotal: 6

Finance, 6 credits

FIN 445 Financial Statement Analysis 3
RMI 270 Principles of Risk Management and Insurance 3

Marketing, 6 credits from

ECON 301 Intermediate Microeconomics 3
MKG 310 Consumer Behavior 3
MKG 325 Professional Selling 3
MKG 345 Procurement and Supply Management 3
MKG 400 Product Management 3
MKG 410 Marketing Channels 3
MKG 420 Integrated Marketing Communications 3

Subtotal: 6
It is possible for a student, in consultation with a faculty advisor, to design an individual program to meet specific academic interests. This program will be designated as a business administration major.

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, 161, 162, 165, or 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

MAJOR IN INTERNATIONAL BUSINESS (BA)
81 CREDITS

International business majors are required to demonstrate proficiency in one foreign language normally through the 202 level. Student may be able to earn language credit through equivalency in consultation with the Department of Modern Languages and Classics.

Miller College of Business core, 45 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
</tr>
<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
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<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business with</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Integrated Computer Applications</td>
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</tr>
<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 249</td>
<td>Foundations of Business Communication</td>
<td>3</td>
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<tr>
<td>ISOM 351</td>
<td>Operations Management</td>
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<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
<td>3</td>
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<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 491</td>
<td>Business Policy and Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 45

Functional area requirement
9 credits of 300-400-level approved business electives in one department

Subtotal: 9

International Studies/Culture requirement
6 credits of approved international studies/culture outside the Miller College of Business.

Subtotal: 6

Subtotal: 81

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

Students should consult the international business program administrator to receive lists of approved functional and international studies/culture courses.

MINOR IN BUSINESS ADMINISTRATION FOR GRAPHIC ARTS MANAGEMENT
(See the School of Art (p. 102).)

MINOR IN FOUNDATIONS OF BUSINESS
24 CREDITS

This minor is not open to majors in the Miller College of Business.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>ACC 202</td>
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<td>3</td>
</tr>
<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
<td>3</td>
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</tbody>
</table>
ECON 201  Elementary Microeconomics  3  
ECON 202  Elementary Macroeconomics  3  
ECON 221  Business Statistics  3  
ISOM 125  Introduction to Business with Integrated Computer Applications  3  
ISOM 210  Business Information Systems  3  

**Subtotal: 24**

Recommended electives

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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</table>

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

**MINOR IN INTERNATIONAL BUSINESS**

**33 CREDITS**

*Open only to* Miller College of Business majors and requires a minor in a foreign language.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECON 351</td>
<td>International Economics</td>
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</tr>
<tr>
<td>FIN 352</td>
<td>Global Finance</td>
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<tr>
<td>INTB 265</td>
<td>Introduction to International Business</td>
<td>3</td>
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<tr>
<td>MGT 301</td>
<td>International Management</td>
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<td>MKG 470</td>
<td>International Marketing</td>
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3 credits from

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<th>Course</th>
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<th>Credits</th>
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<td>INTB 300</td>
<td>Foreign Field Study in Business</td>
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<td>INTB 369</td>
<td>Internship in International Business</td>
<td>1 TO 6</td>
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<tr>
<td>INTB 490</td>
<td>Seminar in International Business Decisions</td>
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**Subtotal: 3**

Minor in foreign language

**Subtotal: 15**

Subtotal: 33

**MINOR IN SIX SIGMA**

**18 CREDITS**

Required Courses

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
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<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>LSCM 355</td>
<td>Quality Management and Lean Six Sigma</td>
<td>3</td>
</tr>
<tr>
<td>LSCM 375</td>
<td>Six Sigma Foundations</td>
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<td>LSCM 475</td>
<td>Advanced Six Sigma</td>
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Electives, 3 credits from

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<th>Title</th>
<th>Credits</th>
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<tr>
<td>ACC 306</td>
<td>Intermediate Management Accounting</td>
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<tr>
<td>ISOM 300</td>
<td>Project Management</td>
<td>3</td>
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<tr>
<td>LSCM 361</td>
<td>Simulation, Modeling, and Optimization</td>
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<tr>
<td>MKG 350</td>
<td>Marketing Research and Analytics</td>
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**Subtotal: 3**

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. Students must have credit in ISOM 125 and ISOM 210 or equivalents.* Open only to* Miller College of Business majors.

**ACCOUNTING**

J. Ledbetter, Chairperson  
bsu.edu/accounting

Accounting is often described as the “language of business.” Business managers, stockholders, investors, creditors, government agencies, and labor groups depend on accountants for financial data and need to understand the “language.” Majors in accounting prepare students for careers in public accounting as certified public accountants (CPA) or for careers as accountants for individual companies in private industry, government agencies, or nonprofit organizations.

Under current state law, an Indiana candidate must complete 150 credits of education containing the equivalent of an accounting major in order to take the CPA Examination. This means that a candidate cannot sit for the CPA Examination with only a 120-credit bachelor’s degree in accounting. To obtain the 30 additional credits necessary to take the CPA Exam, the Department and its Alumni Advisory Council recommend that students complete the 30-credit master’s degree.
MAJOR IN ACCOUNTING (BA/BS)

72 CREDITS

Miller College of Business core, 45 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
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</tr>
<tr>
<td>ACC 202</td>
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<td>3</td>
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<td>BL 260</td>
<td>Principles of Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
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</tr>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
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<tr>
<td>ISOM 125</td>
<td>Introduction to Business with</td>
<td>3</td>
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<td></td>
<td>Integrated Computer Applications</td>
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<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
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<tr>
<td>ISOM 249</td>
<td>Foundations of Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 351</td>
<td>Operations Management</td>
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</tr>
<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 491</td>
<td>Business Policy and Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
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Subtotal: 45

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ACC 301</td>
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<td>ACC 302</td>
<td>Intermediate Accounting 2</td>
<td>3</td>
</tr>
<tr>
<td>ACC 305</td>
<td>Accounting Information Systems</td>
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<tr>
<td>ACC 306</td>
<td>Intermediate Management Accounting</td>
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</tr>
<tr>
<td>ACC 401</td>
<td>Introduction to Taxation</td>
<td>3</td>
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<tr>
<td>ACC 410</td>
<td>Advanced Topics in Taxation</td>
<td>3</td>
</tr>
<tr>
<td>ACC 440</td>
<td>Advanced Financial Accounting</td>
<td>3</td>
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<tr>
<td>ACC 451</td>
<td>Auditing Principles and Practices</td>
<td>3</td>
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<tr>
<td>ACC 420</td>
<td>Selected Topics in Accounting</td>
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<tr>
<td>ACC 430</td>
<td>Government and Nonprofit Accounting</td>
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</table>

Subtotal: 3

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

ECONOMICS

J. Horowitz, Chairperson
bsu.edu/economics

Economics studies how markets coordinate the activities of people and societies as they make the best use of scarce resources. Economics provides a framework to analyze a wide variety of issues in business, society and politics. For example, economists study everything from business, politics, health, education, poverty, and the environment. Economics majors excel in careers in business, government, law, and education.

The Department of Economics offers courses in a variety of topics including microeconomics, macroeconomics, money and banking, public finance, labor economics, health economics, international economics, economic development, game theory, and econometrics. Economics majors often double major in related fields such as accounting, actuarial science, finance, management, marketing, mathematics, and political science. For information on the many careers available to economics majors and minors, go to the departmental Web site www.bsu.edu/economics.

Students majoring in economics may choose from three concentrations and an interdepartmental major in mathematical economics.

- **Business concentration**: Designed for students planning careers in business especially in accounting, finance, management, and marketing. This option requires completion of the core business classes and students can choose from a wide variety of economics classes.

- **Financial analyst concentration**: Designed for students planning careers in financial portfolio management. The Department of Economics is a Chartered Financial Analyst (CFA) recognized department. This option requires completion of the core business classes and students specialize in classes on money and banking and finance.

- **Liberal arts concentration**: Students in this concentration have three options 1) general economics, 2) law and economics and 3) financial economics. This concentration does not require completion of the core business classes and students can choose from a wide variety of economics classes based on the option they choose.

- **Mathematical economics**: This interdepartmental major is offered in conjunction with the Department of Mathematical Sciences. Mathematical economics prepares students for careers as economic analysts and for graduate work in economics or related fields. A mathematical economics major also facilitates a double
major in either mathematical economics and actuarial science or mathematical economics and mathematical sciences (See Interdepartmental Programs (p. 39)).

Minors in economics are available to majors in the Miller College of Business and all other majors throughout the University. Students in the Social Studies Teaching Major may also select economics as a licensing area.

MAJOR IN ECONOMICS (BA/BS)

33-72 CREDITS

**Business concentration, 69 credits**
Miller College of Business core, 45 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ACC 201</td>
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<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
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<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
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<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
<td>3</td>
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<tr>
<td>ISOM 249</td>
<td>Foundations of Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 351</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
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<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
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<tr>
<td>MGT 491</td>
<td>Business Policy and Strategic Management</td>
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<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
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**Subtotal: 45**

**Required Courses**

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<tr>
<td>ACC 301</td>
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<td>ECON 301</td>
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<td>ECON 302</td>
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<tr>
<td>ACC 301</td>
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</tr>
<tr>
<td>ACC 302</td>
<td>Intermediate Accounting 2</td>
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**Subtotal: 3**

**Financial Analyst concentration, 72 credits**
Miller College of Business core, 45 credits

<table>
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<th>Credits</th>
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<tr>
<td>ACC 201</td>
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<td>ACC 202</td>
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<td>ECON 201</td>
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<td>ISOM 249</td>
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<td>ISOM 351</td>
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<td>MATH 132</td>
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**Subtotal: 45**

**Major core requirements**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ACC 301</td>
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<td>ACC 302</td>
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<td>ECON 301</td>
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<td>ECON 302</td>
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<tr>
<td>FIN 301</td>
<td>Intermediate Finance</td>
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<td>FIN 310</td>
<td>Investments</td>
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<td>FIN 410</td>
<td>Portfolio Management</td>
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<td>FIN 445</td>
<td>Financial Statement Analysis</td>
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**Subtotal: 24**

3 credits from

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<thead>
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<th>Title</th>
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<tbody>
<tr>
<td>ACC 430</td>
<td>Government and Nonprofit Accounting</td>
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<td>ACC 440</td>
<td>Advanced Financial Accounting</td>
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<td>ECON 424</td>
<td>Introduction to Econometrics</td>
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<td>ECON 441</td>
<td>The Theory of Monetary Policy</td>
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**Subtotal: 3**
Liberal arts concentration, 33-40 credits
Liberal arts core requirements, 18-19 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
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<tr>
<td>ECON 202</td>
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<td>ECON 301</td>
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<td>ECON 302</td>
<td>Intermediate Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
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<td>or</td>
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<tr>
<td>MATH 321</td>
<td>Mathematical Statistics</td>
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<tr>
<td>MATH 132</td>
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</table>

Subtotal: **18-19**

Complete general or one concentration
General, 15 credits
9 credits from
- 300-400-level ECON electives | 9

6 credits from
- ECON 300-400-level ECON
- or
- ACC 201 Principles of Accounting 1 | 3
- ACC 202 Principles of Accounting 2 | 3
- FIN 300 Principles of Finance        | 3
- FIN 320 Markets and Institutions    | 3

Economics and law concentration, 21 credits

<table>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>PHIL 200</td>
<td>Symbolic Logic</td>
<td>3</td>
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<td>POLS 130</td>
<td>American National Government</td>
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<tr>
<td>ECON 310</td>
<td>American Economic History/Development from the Civil War to the Present</td>
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<td>ECON 311</td>
<td>Environmental Economics</td>
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<td>ECON 331</td>
<td>Labor Economics</td>
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<td>ECON 332</td>
<td>Labor Relations and Law</td>
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<tr>
<td>ECON 345</td>
<td>The Economics of Government Budgets</td>
<td>3</td>
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<tr>
<td>ECON 351</td>
<td>International Economics</td>
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<td>ECON 370</td>
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6 credits from
- ECON 300-400-level ECON

Subtotal: **33-34**

Financial economics concentration, 21 credits

<table>
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<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ACC 201</td>
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<tr>
<td>ACC 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
</tr>
<tr>
<td>ACC 301</td>
<td>Intermediate Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 424</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 428</td>
<td>Regression and Time Series Models</td>
<td>3</td>
</tr>
<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 310</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 454</td>
<td>Statistics for Risk Modeling</td>
<td>4</td>
</tr>
</tbody>
</table>
| 3 credits from
| ACC 302  | Intermediate Accounting 2            | 3       |
| ECON 441 | The Theory of Monetary Policy        | 3       |
| FIN 301  | Intermediate Finance                 | 3       |
| FIN 410  | Portfolio Management                 | 3       |

Subtotal: **39-40**

MINOR IN ECONOMICS

**18 CREDITS**
Open to both business and non-business majors.
Required Courses
- ECON 201 Elementary Microeconomics | 3
- ECON 202 Elementary Macroeconomics | 3

12 credits from electives in ECON with at least 9 credits from 300- or 400-level courses

Subtotal: **12**
**Teacher Education**

**TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)**

**99 CREDITS**

See Teaching Major in Social Studies, College of Sciences and Humanities (p. 162) for total requirements for this area.

Economics concentration, 15 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6 credits from 300-400-level</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal: 15

**FINANCE AND INSURANCE**

M. Athavale, Chairperson

bsu.edu/finance

bsu.edu/insurance

The Finance and Insurance department offers programs to students who wish to prepare for careers in Finance (FIN) and Risk Management and Insurance (RMI).

The finance curriculum examines the creation, preservation and management of wealth by acquiring and allocating funds, and managing liquidity. Students gain analytical skills and an understanding of financial markets, institutions, corporate finance, investments and portfolio management. Career opportunities include cash and credit manager, financial analyst, investment analyst, portfolio manager, securities broker, and financial planner.

The risk management and insurance curriculum is designed to provide the student with an understanding of how risk is managed by individuals and businesses. Students gain an understanding of life and health insurance, personal insurance, commercial insurance, insurance law, and enterprise risk management. Career opportunities include underwriters, claim adjusters, agents, and risk managers.

Students can also pursue minors in financial planning and risk management and insurance. These minors introduce the student to basic concepts in the respective field and are designed to augment a student’s major field of study or to satisfy a student’s curiosity about the discipline.

**MAJOR IN FINANCE (BA/BS)**

**72 CREDITS**

Miller College of Business core, 45 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
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<tr>
<td>ACC 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
</tr>
<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
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</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 300</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 210</td>
<td>Integrated Computer Applications</td>
<td>1</td>
</tr>
<tr>
<td>ISOM 249</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 351</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 491</td>
<td>Business Policy and Strategic Management</td>
<td>3</td>
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<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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</table>

Subtotal: 57

Electives, 9 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ACC 301</td>
<td>Intermediate Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>ACC 302</td>
<td>Intermediate Accounting 2</td>
<td>3</td>
</tr>
<tr>
<td>ACC 305</td>
<td>Accounting Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACC 306</td>
<td>Intermediate Management Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 401</td>
<td>Introduction to Taxation</td>
<td>3</td>
</tr>
<tr>
<td>BL 367</td>
<td>Principles of Estate Planning</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Intermediate Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 421</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 424</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 441</td>
<td>The Theory of Monetary Policy</td>
<td>3</td>
</tr>
<tr>
<td>FIN 352</td>
<td>Global Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 369</td>
<td>Internship in Finance</td>
<td>3 OR 6</td>
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</table>

Subtotal: 18

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Subtotal: 18
FIN 445  Financial Statement Analysis  3  
FIN 497  Independent Study in Finance  3  
RMI 270  Principles of Risk Management and Insurance  3  
RMI 330  Employee Benefits and Retirement Planning  3  

Subtotal: 9

Subtotal: 72
To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

MAJOR IN RISK MANAGEMENT AND INSURANCE (BA/BS)

63 CREDITS
Miller College of Business core, 45 credits
ACC 201  Principles of Accounting 1  3  
ACC 202  Principles of Accounting 2  3  
BL 260  Principles of Business Law  3  
ECON 201  Elementary Microeconomics  3  
ECON 202  Elementary Macroeconomics  3  
ECON 221  Business Statistics  3  
FIN 300  Principles of Finance  3  
ISOM 125  Introduction to Business with Integrated Computer Applications  3  
ISOM 210  Business Information Systems  3  
ISOM 249  Foundations of Business Communication  3  
ISOM 351  Operations Management  3  
MATH 132  Brief Calculus  3  
MGT 300  Managing Behavior in Organizations  3  
MGT 491  Business Policy and Strategic Management  3  
MKG 300  Principles of Marketing  3  

Subtotal: 45

RMI core (required of all RMI majors), 15 credits
RMI 270  Principles of Risk Management and Insurance  3  
RMI 330  Employee Benefits and Retirement Planning  3  
RMI 377  Operations of Insurance Enterprises  3  
RMI 378  Commercial Risk Management and Insurance  3  
RMI 474  Corporate Risk Management  3  

Subtotal: 15

Electives, 3 credits from
ACC 401  Introduction to Taxation  3  
FIN 320  Markets and Institutions  3  
FIN 410  Portfolio Management  3  
FIN 445  Financial Statement Analysis  3  
MGT 361  Foundations of Human Resource Management and Employee Relations  3  
MKG 325  Professional Selling  3  
RMI 369  Internship in Risk Management and Insurance  3 TO 6  
RMI 401  Health Care Risk Management  3  
RMI 473  Insurance Law  3  
RMI 497  Independent Study in Risk Management and Insurance  1 TO 6  

Subtotal: 3

Subtotal: 63
To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

MINOR IN FINANCIAL PLANNING

27 CREDITS
Open to all majors.
Required Courses
ACC 201  Principles of Accounting 1  3  
ACC 401  Introduction to Taxation  3  
BL 260  Principles of Business Law  3  
BL 367  Principles of Estate Planning  3  
FIN 300  Principles of Finance  3  
FIN 310  Investments  3  
FIN 480  Financial Planning Process and Case Development  3  
RMI 270  Principles of Risk Management and Insurance  3  

Subtotal: 3
The **Logistics and Supply Chain Management (LSCM)** major is the area of study that teaches students to systematically make management decisions using appropriate tools to manage logistics and supply chain processes in both services and manufacturing organizations. LSCM majors deal with the management of processes that create goods and services. Major subject areas include in-bound and out-bound logistics in global supply chains, scheduling and planning, inventory management, supply chain management, quality management, project management, quantitative business analysis, customer relationship management, procurement, multi-modal transportation, pricing and economics, warehousing, packaging and materials handling, etc. Our LSCM graduates find job opportunities as purchasing managers, warehouse supervisors, customs specialists, procurement managers, global logistics managers, inventory planners, logistics automation specialists, transportation solutions analysts, materials coordinators, directors of logistics, distribution center managers, logistics analysts, and quality control analysts in automobile industry, computer industry, financial industry, manufacturing and transportation industry, pharmaceutical industry, retail and health care industry.

The **Business Analytics** (BA) major is the study of the big data that teaches students methods and processes of gathering large amount of data from business, media, economics, healthcare, etc. and then using statistical methods to convert the data into usable knowledge and insights for business leaders, policy makers, media and medical professionals to make decisions and develop strategic plans. Graduates of the Business Analytics program will be employed as big data analysts in various industries such as banking, consulting, e-commerce, finance, investment, information technology (IT), marketing, media, health care, and government. They may work with research & development (R&D) teams to develop strategies and systems for customized data needs or work with IT specialists to improve the security and efficiency of data processes or work with business executives to determine the health and direction of a specific aspect of the organization. Our BA graduates find job opportunities as big data analyst, business analyst, data administrator, analytics manager, or data scientist.

The **Computer Technology** (BA/BS) program transforms students into technology leaders in a sustainable global economy. This is achieved by presenting students with a strong foundation in the concepts, theories, and practices...
that serve as the basis for the varying aspects of information technology. This includes the design, implementation, and administration of secured systems and networks. Students then have the opportunity to develop expertise in specialty areas of interest through electives in higher level technology courses. Since the purpose of information technology is to facilitate the goals and objectives of a business or organization, students are required to complete the Minor in Business Administration for Computer Technology. With an understanding of how organizations operate, students will be able to more effectively design systems and networks that will support the needs of the business or organization.

ASSOCIATE IN SCIENCE—BUSINESS INFORMATION TECHNOLOGY (AS)

60 credits
There is a college moratorium on admission to this degree.

MAJOR IN BUSINESS ANALYTICS (BA/BS)

66 CREDITS
Miller College of Business core, 45 credits
ACC 201 Principles of Accounting 1 3
ACC 202 Principles of Accounting 2 3
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
ECON 202 Elementary Macroeconomics 3
ECON 221 Business Statistics 3
FIN 300 Principles of Finance 3
ISOM 125 Introduction to Business with Integrated Computer Applications 3
ISOM 210 Business Information Systems 3
ISOM 249 Foundations of Business Communication 3
ISOM 351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Organizations 3
MGT 491 Business Policy and Strategic Management 3
MKG 450 Advanced Marketing Research and Analytics 3

Subtotal: 66
To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

MAJOR IN COMPUTER INFORMATION SYSTEMS (BA/BS)

69 CREDITS
Miller College of Business core, 45 credits
ACC 201 Principles of Accounting 1 3
ACC 202 Principles of Accounting 2 3
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
ECON 202 Elementary Macroeconomics 3
ECON 221 Business Statistics 3
FIN 300 Principles of Finance 3
ISOM 125 Introduction to Business with Integrated Computer Applications 3
ISOM 210 Business Information Systems 3
ISOM 249 Foundations of Business Communication 3
ISOM 351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Organizations 3

Subtotal: 45
Business analytics core requirements
BA 305 Introduction to Business Analytics 3
BA 345 Data Mining for Business Analytics 3
BA 436 Data Warehouse and Business Intelligence 3
BA 482 Business Analytics Research (Capstone Course) 3
ECON 424 Introduction to Econometrics 3
Required disciplinary analytics, 6 credits from
BA 310 Data Visualization for Business Analytics 3
CIS 413 Database Management Systems 3
ECON 321 Advanced Business Statistics 3
ECON 330 Sports Economics 3
JOUR 482 Media Analytics in Practice 3
LSCM 361 Simulation, Modeling, and Optimization 3

Subtotal: 69
MGT 491  Business Policy and Strategic Management  3
MKG 300  Principles of Marketing  3

**Subtotal: 45**

Information systems core, 21 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 226</td>
<td>Business Systems Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 317</td>
<td>Computer Networks for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 410</td>
<td>Information Systems Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS 412</td>
<td>Business Process Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413</td>
<td>Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 490</td>
<td>Information Systems Integration Project</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 300</td>
<td>Project Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 21**

Electives (choose one course for 3 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 305</td>
<td>Introduction to Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BA 310</td>
<td>Data Visualization for Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BA 436</td>
<td>Data Warehouse and Business Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CIS 421</td>
<td>Network and Security Management</td>
<td>3</td>
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<tr>
<td>CIS 422</td>
<td>Health Care Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 450</td>
<td>E-Commerce Design and Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 369</td>
<td>Industry Internship</td>
<td>3 TO 6</td>
</tr>
</tbody>
</table>

**Subtotal: 69**

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

**MAJOR IN COMPUTER TECHNOLOGY (BA/BS)**

**79 CREDITS**

The computer technology program transforms students into technology leaders in a sustainable global economy. This is achieved by presenting students with a strong foundation in the concepts, theories, and practices that serve as the basis for the varying aspects of information technology. This includes the design, implementation, and administration of secured systems and networks. Students then have the opportunity to develop expertise in specialty areas of interest through electives in higher level technology courses.

Since the purpose of information technology is to facilitate the goals and objectives of a business or organization, students are required to complete the Minor in Business Administration for Computer Technology. With an understanding of how organizations operate, students will be able to more effectively design systems and networks that will support the needs of the business or organization.

**Core requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CS 110</td>
<td>Introduction to Computer Science and Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 120</td>
<td>Computer Science 1: Programming Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CT 111</td>
<td>Microcomputer Assembly and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>CT 210</td>
<td>Fundamentals of Network Design</td>
<td>3</td>
</tr>
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<td>CT 211</td>
<td>System Administration</td>
<td>3</td>
</tr>
<tr>
<td>CT 221</td>
<td>Alternative PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CT 310</td>
<td>Internetwork Design and Administration</td>
<td>3</td>
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<tr>
<td>CT 311</td>
<td>Infrastructure Services</td>
<td>3</td>
</tr>
<tr>
<td>CT 321</td>
<td>Alternative Server Operating Systems</td>
<td>3</td>
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<tr>
<td>CT 340</td>
<td>Wireless Network Communications</td>
<td>3</td>
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<tr>
<td>CT 385</td>
<td>Internship in Computer Technology</td>
<td>1 TO 3</td>
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<tr>
<td>CT 465</td>
<td>Enterprise Security Administration</td>
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<tr>
<td>CT 466</td>
<td>Capstone in Computer Technology</td>
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<tr>
<td>MATH 132</td>
<td>Brief Calculus</td>
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**Subtotal: 43**

Electives, 15 credits from (choose 5)

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<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>CT 264</td>
<td>Fundamentals of Defensive Security</td>
<td>3</td>
</tr>
<tr>
<td>CT 265</td>
<td>Fundamentals of Offensive Security</td>
<td>3</td>
</tr>
<tr>
<td>CT 270</td>
<td>Computer and Industrial Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CT 299X</td>
<td>Special Topics in Computer Technology</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>CT 300</td>
<td>Sustainability in Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>CT 330</td>
<td>Internetwork Switching, Design, and Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 43**
CT 363 Intrusion Detection, Prevention, and Response 3
CT 371 Voice Over Internet Protocol Networking 3
CT 380 Electronic Communications Administration 3
CT 410 Scalable Internetworking 3
CT 421 Data Storage and Disaster Recovery 3
CT 430 Convergent Network Systems 3
CT 440 Directory Services 3
CT 450 Enterprise Infrastructure Design 3
CT 464 Industrial Network Security 3
CT 499 Problems in Computer Technology 1 TO 3

Subtotal: 15

Complete the following required minor
Minor in Business Administration for Computer Technology, 21 credits
CIS 226 Business Systems Application Development 3
CIS 413 Database Management Systems 3
ECON 116 Survey of Economic Ideas 3
ISOM 125 Introduction to Business with Integrated Computer Applications 3
ISOM 210 Business Information Systems 3
ISOM 300 Project Management 3
MGT 300 Managing Behavior in Organizations 3

Subtotal: 21

MAJOR IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT (BA/BS)
63 CREDITS
Miller College of Business core, 45 credits
ACC 201 Principles of Accounting 1 3
ACC 202 Principles of Accounting 2 3
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
ECON 202 Elementary Macroeconomics 3
ECON 221 Business Statistics 3
FIN 300 Principles of Finance 3
ISOM 125 Introduction to Business with Integrated Computer Applications 3
ISOM 210 Business Information Systems 3
ISOM 249 Foundations of Business Communication 3
ISOM 351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Organizations 3
MGT 491 Business Policy and Strategic Management 3
MKG 300 Principles of Marketing 3

Subtotal: 45

Logistics and supply chain management core, 15 credits
ISOM 369 Industry Internship 3 TO 6
LSCM 361 Simulation, Modeling, and Optimization 3
LSCM 453 Manufacturing Planning and Control 3
LSCM 460 Global Logistics and Transportation Management 3
LSCM 480 Supply Chain Management Integration Project 3

Subtotal: 15

Electives (choose any one from the list), 3 credits from
CIS 456 Information Technology and Business Analytics 3
ISOM 300 Project Management 3
LSCM 355 Quality Management and Lean Six Sigma 3
LSCM 452 Inventory, Warehousing and Negotiations 3

Subtotal: 3

Subtotal: 63
To meet the graduation requirement of 120 credits, students need to take additional 6 credits from the above electives, or more internship credits, or from other elective courses of the department.

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

MINOR IN BUSINESS ANALYTICS
### 15 CREDITS

**Requirements List**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 305</td>
<td>Introduction to Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BA 345</td>
<td>Data Mining for Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BA 436</td>
<td>Data Warehouse and Business Intelligence</td>
<td>3</td>
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</table>

**Subtotal:** 9

6 credits from

<table>
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<tr>
<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>BA 310</td>
<td>Data Visualization for Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BA 482</td>
<td>Business Analytics Research (Capstone Course)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413</td>
<td>Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 321</td>
<td>Advanced Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 330</td>
<td>Sports Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 424</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 482</td>
<td>Media Analytics in Practice</td>
<td>3</td>
</tr>
<tr>
<td>LSCM 361</td>
<td>Simulation, Modeling, and Optimization</td>
<td>3</td>
</tr>
<tr>
<td>MKG 450</td>
<td>Advanced Marketing Research and Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 15

ENG 104 is a prerequisite for ISOM 249.

### MINOR IN COMPUTER TECHNOLOGY

**18 CREDITS**

**Requirements List**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 111</td>
<td>Microcomputer Assembly and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>CT 210</td>
<td>Fundamentals of Network Design</td>
<td>3</td>
</tr>
<tr>
<td>CT 211</td>
<td>System Administration Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CT 310</td>
<td>Internetwork Design and Administration</td>
<td>3</td>
</tr>
<tr>
<td>CT 311</td>
<td>Infrastructure Services</td>
<td>3</td>
</tr>
<tr>
<td>CT elective course</td>
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</table>

**Subtotal:** 18

### MINOR IN FOUNDATIONS OF COMPUTER SYSTEMS

**22-24 CREDITS**

**Requirements List**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CS 120</td>
<td>Computer Science 1: Programming Fundamentals</td>
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<tr>
<td>CT 111</td>
<td>Microcomputer Assembly and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
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<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
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**Subtotal:** 13

3-4 credits from

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<tr>
<td>MATH 161</td>
<td>Applied Calculus 1</td>
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<tr>
<td>or</td>
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<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
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**Subtotal:** 3-4

Electives, 6-7 credits from outside the student's major department

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CIS 226</td>
<td>Business Systems Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CS 121</td>
<td>Computer Science 2: Data Structures and Objects</td>
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<tr>
<td>CT 221</td>
<td>Alternative PC Operating Systems</td>
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</table>
### MINOR IN INFORMATION SYSTEMS FOR COMPUTER SCIENCE MAJORS

**18 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ISOM 300</td>
<td>Project Management</td>
<td>3</td>
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<tr>
<td>CIS 450</td>
<td>E-Commerce Design and Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
<td>3</td>
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<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
<td>3</td>
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<td>ISOM 300</td>
<td>Project Management</td>
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Subtotal: 6-7

Subtotal: 18

### MINOR IN INFORMATION SYSTEMS FOR NON-COMPUTER SCIENCE MAJORS

**18 CREDITS**

<table>
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<tr>
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<tbody>
<tr>
<td>CIS 226</td>
<td>Business Systems Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 228</td>
<td>Advanced Microcomputer Applications for Business</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 300</td>
<td>Project Management</td>
<td>3</td>
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<tr>
<td>CIS 226</td>
<td>Business Systems Application Development</td>
<td>3</td>
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<tr>
<td>CIS 228</td>
<td>Advanced Microcomputer Applications for Business</td>
<td>3</td>
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<tr>
<td>CIS 317</td>
<td>Computer Networks for Business</td>
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<tr>
<td>CIS 415</td>
<td>Information Systems Management</td>
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<tr>
<td>CIS 450</td>
<td>E-Commerce Design and Applications</td>
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Subtotal: 12

Subtotal: 6

Subtotal: 18

### MINOR IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

**15 CREDITS**

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<tbody>
<tr>
<td>ISOM 300</td>
<td>Project Management</td>
<td>3</td>
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<tr>
<td>ISOM 351</td>
<td>Operations Management</td>
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<tr>
<td>LSCM 355</td>
<td>Quality Management and Lean Six Sigma</td>
<td>3</td>
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<tr>
<td>LSCM 361</td>
<td>Simulation, Modeling, and Optimization</td>
<td>3</td>
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<tr>
<td>LSCM 452</td>
<td>Inventory, Warehousing and Negotiations</td>
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<td>LSCM 453</td>
<td>Manufacturing Planning and Control</td>
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<tr>
<td>LSCM 460</td>
<td>Global Logistics and Transportation Management</td>
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Subtotal: 9

Subtotal: 6

Subtotal: 15

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. Students must have credit in ISOM 125 and ISOM 210 or equivalent.

### MINOR IN NETWORK ADMINISTRATION FOR NON-COMPUTER TECHNOLOGY MAJORS

**18 CREDITS**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CT 210</td>
<td>Fundamentals of Network Design</td>
<td>3</td>
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<tr>
<td>CT 310</td>
<td>Internetwork Design and Administration</td>
<td>3</td>
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<tr>
<td>CT 330</td>
<td>Internetwork Switching, Design, and Administration</td>
<td>3</td>
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<tr>
<td>CT 340</td>
<td>Wireless Network Communications</td>
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<tr>
<td>CT 410</td>
<td>Scalable Internetworking</td>
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Subtotal: 15
Electives, 3 credits from
CT 371  Voice Over Internet Protocol Networking  3
CT 430  Convergent Network Systems  3
CT 450  Enterprise Infrastructure Design  3

**Subtotal: 3**

*Not open to students with a computer technology major.*

Subtotal: 18

**MINOR IN SIX SIGMA**

15 credits
(See Interdepartmental in the Miller College of Business (p. 65).)

**TEACHING MAJOR IN BUSINESS EDUCATION (BA/BS)**

97 credits
There is a college moratorium on admission to this degree.

**MANAGEMENT**

S. Hji-Avgoustis, Chairperson
bsu.edu/management

Modern organizations need competent managers who can address emerging issues in a global economy. Dealing with global competition, ethical issues, and diverse work groups is increasingly important in the managerial decision process.

*Entrepreneurial management* majors learn to prepare for the challenges involved in new venture creation and small business management. The program is designed to help students understand risk and develop an entrepreneurial perspective by overcoming challenges and achieving success.

*Human resources management* majors learn the theory and practice behind analyzing and solving the problems of hiring, training, evaluating, leading, and motivating people. The major emphasizes practical education, internship and immersive learning.

*Hospitality and Food management* majors are prepared for management positions in the hospitality industry with a focus on (1) convention and event planning, (2) food and beverage management, and (3) hotel operation. The program offers students a blend of theory relating to management and customer services and practical experiences in the field through internships.

*Residential Property management* majors prepare for the challenges involved in the oversight of a variety of property types by understanding the needs and requirements of the users, the investors, and the governing agencies. As students prepare for onsite and corporate-level positions, their learning is enhanced through internships, immersive learning experiences, and mentorship by an advisory board of real estate industry leaders.

*Business Administration* majors can potentially launch a career in any industry, from retail to manufacturing, construction to consulting.

The department also offers minors in *entrepreneurial management, food management, foundations of management, hospitality management, organizational communication, and residential property management.*

**MAJOR IN ENTREPRENEURIAL MANAGEMENT (BA/BS)**

72 CREDITS

Miller College of Business core, 45 credits
ACC 201  Principles of Accounting 1  3
ACC 202  Principles of Accounting 2  3
BL 260  Principles of Business Law  3
ECON 201  Elementary Microeconomics  3
ECON 202  Elementary Macroeconomics  3
ECON 221  Business Statistics  3
FIN 300  Principles of Finance  3
ISOM 125  Introduction to Business with Integrated Computer Applications  3
ISOM 210  Business Information Systems  3
ISOM 249  Foundations of Business Communication  3
ISOM 351  Operations Management  3
MATH 132  Brief Calculus  3
MGT 300  Managing Behavior in Organizations  3
MGT 491  Business Policy and Strategic Management  3
MKG 300  Principles of Marketing  3

**Subtotal: 45**

Required, 21 credits
ENT 241  The Entrepreneurial Experience  3
ENT 341  Opportunity Identification  3
ENT 346  Product and Service Design  3
ENT 347  Business Model Generation  3
ENT 441  Entrepreneurial Decision Making  3
ENT 443  Venture Financing  3
ENT 449  New Venture Creation  3

**Subtotal: 72**
Subtotal: 21

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>COMM 375</td>
<td>Presentational Communication</td>
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<td>ENT 244</td>
<td>Social Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ENT 343</td>
<td>Venture Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MGT 243</td>
<td>Dynamics of Family Business</td>
<td>3</td>
</tr>
<tr>
<td>MGT 301</td>
<td>International Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 361</td>
<td>Foundations of Human Resource Management and Employee Relations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 369</td>
<td>Management Internship</td>
<td>3</td>
</tr>
<tr>
<td>MGT 409</td>
<td>Business Ethics</td>
<td>3</td>
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<tr>
<td>TDPT 161</td>
<td>Introduction to Manufacturing Industries</td>
<td>3</td>
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<tr>
<td>TDPT 280</td>
<td>3-D Prototyping</td>
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<td>TDPT 495</td>
<td>Green Prototyping and Upcycling</td>
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<td>TEDU 102</td>
<td>Design Techniques</td>
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Subtotal: 6

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HOSP 300</td>
<td>Cost Control in Hospitality and Food Industry</td>
<td>3</td>
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<tr>
<td>HOSP 369</td>
<td>Internship in Food or Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 376</td>
<td>Introduction to Event Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 395</td>
<td>Food and Culture</td>
<td>3</td>
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<tr>
<td>FCS 400</td>
<td>Family and Consumer Sciences</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 261</td>
<td>Introduction to Sustainable Tourism</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 262</td>
<td>Tourism Regions</td>
<td>3</td>
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<tr>
<td>HOSP 400</td>
<td>Restaurant Management and Quantity Food Production</td>
<td>4</td>
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<tr>
<td>HOSP 450</td>
<td>Strategic Operation in Lodging Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 475</td>
<td>Catering for Profit</td>
<td>3</td>
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<tr>
<td>HOSP 477</td>
<td>Advanced Event Management</td>
<td>3</td>
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<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
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</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
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<td>MGT 361</td>
<td>Foundations of Human Resource Management and Employee Relations</td>
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<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
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<tr>
<td>NUTR 275</td>
<td>Personal Nutrition</td>
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Students completing this major are required to complete a bachelor of arts degree or a minor.

Subtotal: 60

MAJOR IN HUMAN RESOURCE MANAGEMENT (BA/BS)

69 CREDITS

Miller College of Business core, 45 credits

<table>
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<tr>
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<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
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<td>ACC 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
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<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
<td>3</td>
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<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
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<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
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<tr>
<td>ECON 221</td>
<td>Business Statistics</td>
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</table>
### FIN 300: Principles of Finance
3

### ISOM 125: Introduction to Business with Integrated Computer Applications
3

### ISOM 210: Business Information Systems
3

### ISOM 249: Foundations of Business Communication
3

### ISOM 351: Operations Management
3

### MATH 132: Brief Calculus
3

### MGT 300: Managing Behavior in Organizations
3

### MGT 491: Business Policy and Strategic Management
3

### MKG 300: Principles of Marketing
3

**Subtotal: 45**

**Department core, 18 credits**

### MGT 361: Foundations of Human Resource Management and Employee Relations
3

### MGT 363: Talent Management
3

### MGT 365: Employment Law
3

### MGT 461: Managing Total Rewards
3

### MGT 465: Talent Acquisition and Retention
3

### MGT 469: Contemporary Issues in Human Resource Management
3

**Subtotal: 18**

6 credits from

### COMM 330: Small Group Communication
3

### COMM 351: Organizational Communication
3

### ECON 331: Labor Economics
3

### MGT 301: International Management
3

### MGT 369: Management Internship
3

### MGT 463: Global Human Resource Management
3

### MGT 467: Leadership and Change Management
3

**Subtotal: 6**

**Subtotal: 69**

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

---

### MAJOR IN RESIDENTIAL PROPERTY MANAGEMENT (BA/BS)

#### 63-66 CREDITS

**Requirements List**

<table>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
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<tr>
<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
<td>3</td>
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<td>ECON 201</td>
<td>Elementary Microeconomics</td>
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<tr>
<td>HOSP 210</td>
<td>Customer Service</td>
<td>3</td>
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<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
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<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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<tr>
<td>PMGT 104</td>
<td>Housing Decisions</td>
<td>3</td>
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<td>PMGT 123</td>
<td>Interior Design Basics</td>
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<tr>
<td>PMGT 235</td>
<td>Introduction to Residential Property Management</td>
<td>3</td>
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<tr>
<td>PMGT 275</td>
<td>Marketing and Leasing Residential Properties</td>
<td>3</td>
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<td>PMGT 305</td>
<td>Maintenance for Property Managers</td>
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<tr>
<td>PMGT 315</td>
<td>Senior Housing: Design, Marketing, and Management</td>
<td>3</td>
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<tr>
<td>PMGT 330</td>
<td>Apartment Financial Management</td>
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<td>PMGT 350</td>
<td>Residential Equipment, Energy and Technology</td>
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<td>PMGT 369</td>
<td>RPM Internship</td>
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<td>PMGT 375</td>
<td>Simulation in Residential Property Management</td>
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<td>PMGT 400</td>
<td>Housing and Society</td>
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<td>PMGT 405</td>
<td>Management of Government-Assisted Housing</td>
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<td>PMGT 425</td>
<td>Residential Property Management Project</td>
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<td>PMGT 435</td>
<td>Trends and Issues in Residential Property Management</td>
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<td>RE 230</td>
<td>Real Estate Principles</td>
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<tr>
<td>TDPT 213</td>
<td>Interior Construction Materials, Processes, and Products</td>
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</table>

Subtotal: 63-66

Students pursuing the residential property management major must meet the following additional requirements:

- Grade of C or better in PMGT 275, 369, and 425.
- Sit for the National Apartment Leasing Professional (NALP) and Certified Apartment Manager (CAM) exams.

Subtotal: 63-66
MINOR IN ENTREPRENEURIAL MANAGEMENT
18 CREDITS

Required Courses
ACC 201  Principles of Accounting 1  3
or
ECON 116  Survey of Economic Ideas  3
or
ECON 201  Elementary Microeconomics  3

ENT 241  The Entrepreneurial Experience  3
ENT 342  Marketing for New Ventures  3
ENT 343  Venture Leadership  3
ENT 345  Management for New Ventures  3

3 credits from
COMM 375  Presentational Communication  3
ENT 244  Social Entrepreneurship  3
INTB 265  Introduction to International Business  3
MGT 243  Dynamics of Family Business  3
MGT 300  Managing Behavior in Organizations  3
MGT 301  International Management  3
MGT 361  Foundations of Human Resource Management and Employee Relations  3
MGT 399  Management Practicum  1 TO 6
MGT 497  Independent Study  1 TO 9
MKG 300  Principles of Marketing  3
RMI 270  Principles of Risk Management and Insurance  3

Subtotal: 3

Subtotal: 18

MINOR IN FOOD MANAGEMENT
18 CREDITS

Requirements List
HOSP 105  Hospitality and Foodservice Industry  1
HOSP 110  Principles of Food Preparation and Food Science  3
HOSP 147  Foodservice Sanitation  1
HOSP 222  Advanced Culinary Techniques  3
HOSP 400  Restaurant Management and Quantity Food Production  4
HOSP 475  Catering for Profit  3
NUTR 275  Personal Nutrition  3

Total Credit Hours: 18
This minor is not open to hospitality and food management majors.

MINOR IN FOUNDATIONS OF MANAGEMENT
24 CREDITS

Offers students the essential fundamentals for practicing business management in numerous applied settings. Presents students with the essentials of operations management, human resource management, organizational behavior, and small business management. This minor is not open to Miller College of Business majors.

Required Courses
ACC 201  Principles of Accounting 1  3
ECON 116  Survey of Economic Ideas  3
or
ECON 201  Elementary Microeconomics  3

ENT 241  The Entrepreneurial Experience  3
ISOM 125  Introduction to Business with Integrated Computer Applications  3
ISOM 210  Business Information Systems  3
ISOM 251  Introductory Operations Management  3
MGT 300  Managing Behavior in Organizations  3
MGT 361  Foundations of Human Resource Management and Employee Relations  3

Subtotal: 24
The prerequisite for ISOM 210 is C or better grade in ISOM 125.

MINOR IN HOSPITALITY MANAGEMENT
22 CREDITS

Requirements List
ACC 201  Principles of Accounting 1  3
HOSP 105  Hospitality and Foodservice Industry  1
HOSP 210  Customer Service  3
HOSP 250  Lodging Management  3
<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>HOSP 300</td>
<td>Cost Control in Hospitality and Food Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 376</td>
<td>Introduction to Event Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 450</td>
<td>Strategic Operation in Lodging Industry</td>
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<tr>
<td>HOSP 477</td>
<td>Advanced Event Management</td>
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<tr>
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<td><strong>Subtotal:</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

**MINOR IN MANAGEMENT AND ORGANIZATIONAL COMMUNICATION**

**21 CREDITS**

*Open only to* majors in communication studies (concentration 1), or majors in human resource management, entrepreneurial management, or business administration (concentration 2), or other majors with permission from the Department of Communication Studies (concentration 3). Only 3 credits from a student’s major may count in any concentration of the minor.

Concentration 1: For majors in communication studies, 21 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENT 241</td>
<td>The Entrepreneurial Experience</td>
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Concentration 2: For majors in human resource management, entrepreneurial management, or business administration, 21 credits

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<td>ENT 241</td>
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Concentration 3: For other majors (requires permission of Comm Studies chair), 21 credits

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MINOR IN RESIDENTIAL PROPERTY MANAGEMENT

21 CREDITS

Requirements List

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Subtotal: 12

6 credits from

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<td>Senior Housing: Design, Marketing, and Management</td>
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<td>Residential Equipment, Energy and Technology</td>
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Subtotal: 6

3 credits from

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<tr>
<td>or</td>
<td>ECON 201 Elementary Microeconomics</td>
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</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
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<td>MKG 300</td>
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Subtotal: 3

(See Certificates.)

MARKETING

R. Wahlers, Chairperson
bsu.edu/marketing

A business organization’s marketing program is the cornerstone of its competitive success in both domestic and global arenas. Marketing includes all activities involved in developing, promoting, and distributing products and services to the marketplace at the right price to provide sustainable value to the end users as well as society at large. Marketing programs involve strategic decision making in such areas as marketing research-based product development and brand management; integrated marketing communications including advertising, social media, digital marketing strategy and analytics, public relations, and professional selling; and distribution channel design. BSU’s program curriculum is thus designed to prepare individuals for a wide range of entry-level marketing positions leading to successful marketing management careers in both commercial and not-for-profit organizations. The Department of Marketing offers programs in Marketing, Professional Selling, International Business, Fashion Merchandising, and Apparel Design.

MAJOR IN APPAREL DESIGN (BA/BS)

67-70 CREDITS

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<td>Fitting and Intermediate Apparel Construction</td>
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<td>FASH 230</td>
<td>Textiles for Apparel</td>
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<td>FASH 265</td>
<td>Fashion Illustration</td>
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<td>Computerized Software and Presentation for the Fashion Industry</td>
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<td>Apparel Manufacturing and Wholesaling</td>
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<td>FASH 481</td>
<td>Fashion Promotion</td>
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<td>MGT 300</td>
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<td>Principles of Marketing</td>
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Subtotal: 67-70

**MAJOR IN FASHION MERCHANDISING (BA/BS)**

**79 CREDITS**

Requirements List

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<td>The Fashion Industry</td>
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<tr>
<td>MGT 300</td>
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</table>

Students completing this major must complete an entrepreneurial management or marketing minor.

Subtotal: 18

Subtotal: 79

**MAJOR IN MARKETING (BA/BS)**

**72 CREDITS**

*Not open to professional selling majors.*

Miller College of Business core, 45 credits

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Subtotal: 45

Core requirements, 12 credits

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Subtotal: 12
15 credits from

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Subtotal: 15

3 credits from

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Subtotal: 3

3 credits from

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Subtotal: 3

132 simultaneously substitutes for the University Core Curriculum math requirement.

MAJOR IN PROFESSIONAL SELLING (BA/BS)

72 CREDITS

Not open to marketing majors.

Miller College of Business core, 45 credits

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<td>MGT 491</td>
<td>Business Policy and Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 45

Core requirements, 27 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKG 325</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKG 350</td>
<td>Marketing Research and Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MKG 425</td>
<td>Seminar in Advanced Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKG 427</td>
<td>Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 429</td>
<td>Sales Technology Application</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 15

To assist students in choosing electives from above that are most closely related to a particular career interest, please see the marketing major advisor.

A total of 6 credits may be earned for marketing majors and a total of 3 credits may be earned for marketing minors across a combination of MKG 369, MKG 495, MKG 497, and MKG 498.

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH
### Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKG 310</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKG 375</td>
<td>Social Media Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKG 470</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

6 credits from MKG 310, 375, and 470.

**Subtotal: 27**

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

#### MINOR IN FASHION

**18 CREDITS**

**Requirements List**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 101</td>
<td>Dimensions of Clothing</td>
<td>3</td>
</tr>
<tr>
<td>FASH 230</td>
<td>Textiles for Apparel</td>
<td>3</td>
</tr>
<tr>
<td>FASH 270</td>
<td>The Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASH 365</td>
<td>Study of Fashion Forecasting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

6 credits from FASH 265, 345, 360, and 481.

**Subtotal: 18**

*Not open to students in apparel design or fashion merchandising concentrations. Students should take CHEM 100 for the University Core Curriculum to satisfy the prerequisite for FASH 230.*

#### MINOR IN MARKETING

**21 CREDITS**

Open to all students with an overall GPA of 2.25 or better, except majors in marketing or professional selling.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ECON 201 Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKG 325</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKG 427</td>
<td>Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 429</td>
<td>Sales Technology Application</td>
<td>3</td>
</tr>
</tbody>
</table>

15 credits from 300-400 level marketing electives with at least 6 credits from the MKG 400-level courses.

**Subtotal: 15**

#### MINOR IN PROFESSIONAL SELLING

**21 CREDITS**

Open to all students with an overall GPA of 2.25 or better, except majors in marketing or professional selling.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Survey of Economic Ideas</td>
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<tr>
<td>or</td>
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<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKG 325</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKG 427</td>
<td>Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 429</td>
<td>Sales Technology Application</td>
<td>3</td>
</tr>
<tr>
<td>MKG 369</td>
<td>Professional Practice in Marketing</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>MKG 425</td>
<td>Seminar in Advanced Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKG 460</td>
<td>Strategic Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 495</td>
<td>Seminar in Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKG 497</td>
<td>Independent Study in Marketing</td>
<td>1 TO 3</td>
</tr>
</tbody>
</table>

6 credits from MKG 369, 425, 460, 495, 497.

**Subtotal: 21**

#### CERTIFICATE IN SALES BOOT CAMP

**15 credits**

(See Certificates (p. Error! Bookmark not defined.).)
College of Communication, Information, and Media

P. Turner, Dean
bsu.edu/ccim

The College of Communication, Information, and Media is an innovative learning community in which students discover, integrate, and apply the tools needed for success in the communication professions. This includes discovery of the many ways people communicate, integration of the use of information and technology into the student's own communication, and application of these abilities through the practices of writing well, speaking persuasively, and producing media content creatively. Students are mentored to be leaders and innovators in the communication professions and in service to their community. The college offers programs in advertising, public relations, multimedia journalism, digital media production, public communication, interpersonal communication, organizational communication, information and communication sciences, digital media sales and promotion, and emerging digital media.

COMMUNICATION STUDIES

G. Stamp, Chairperson
bsu.edu/commstudies

Communication studies offers programs in public, interpersonal, and organizational communication. The major and minors are designed to prepare students for careers in business, government, politics, corporate communication, public affairs, not-for-profit enterprises, the media, and for graduate study.

Baccalaureate Degrees

Students may receive either a bachelor of arts or a bachelor of science degree in communication studies. Both degrees require completion of 21 credits of core classes that include foundation courses in the study of communication. Students are encouraged to complete these core classes prior to enrolling in more specialized COMM courses. It is also highly recommended that majors complete COMM 201 during the first semester in the department. After completing their core classes, communication studies majors are required to specialize in one of the following concentrations (i.e., students may not choose multiple concentrations):

- **Interpersonal communication:** This concentration exposes students to a range of courses that aid in understanding effective communication in personal relationships and small groups. Students will explore subjects such as relational development, nonverbal communication, and conflict management.
- **Organizational communication:** This concentration prepares students to apply communication theory and research in organizational contexts. Students will examine subjects such as business and professional communication, leadership, organizational communication theory, and training.
- **Public communication:** This concentration allows students to explore the principles that account for communicators’ attempts to influence their audience. Students will study such subjects as persuasion theory, campaign communication, and effective language use in public and mediated communication.

Students who declare a communication studies major must participate in departmental assessment activities.

The department also offers the following minors:

- **Campaign communication:** This minor provides insight into the communication used in political, issues-oriented campaigns. It requires courses in communication studies, journalism, and political science.
- **Communication studies:** This minor offers students a fundamental understanding of basic interpersonal, organizational, and public communication and the opportunity to choose the focus of their communication study. The communication studies minor is not open to communication studies majors.
- **Management and Organizational communication:** This minor introduces students to important communication and human relations issues, especially as they relate to improving human communication skills and applying those skills when dealing with associates at all organizational levels (available to human resource management, entrepreneurial management, business administration and communication studies majors; other majors by permission of COMM Studies chair).

Students interested in teaching speech communication at the middle school or high school level should refer to the English/language arts teacher certification program description (p. 187).

MAJOR IN COMMUNICATION STUDIES (BA/BS)

51 CREDITS

Common core requirements, 21 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 201</td>
<td>Exploration of Communication Studies</td>
<td>2</td>
</tr>
<tr>
<td>COMM 220</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>COMM 240</td>
<td>Introduction to Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 290</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 320</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>COMM 360</td>
<td>Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Presentational Communication</td>
<td>3</td>
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<tr>
<td>COMM 401</td>
<td>Communication Studies Senior Seminar</td>
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</table>

Complete one concentration

Interpersonal communication concentration, 30 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 330</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 335</td>
<td>Communication and Health</td>
<td>3</td>
</tr>
<tr>
<td>COMM 370</td>
<td>Nonverbal Communication in Human Interaction</td>
<td>3</td>
</tr>
<tr>
<td>COMM 440</td>
<td>Advanced Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 442</td>
<td>Communication and Conflict Management</td>
<td>3</td>
</tr>
<tr>
<td>COMM 465</td>
<td>Communication Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>COMM directed electives</td>
<td></td>
<td>6 credits from COMM other than COMM 210, COMM 475</td>
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</table>

Outside directed electives, 6 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CPSY 230</td>
<td>Human Relationship Development</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 250</td>
<td>Family Relations</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 313</td>
<td>The Psychology of Human Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>SOC 221</td>
<td>Introduction to Race and Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 224</td>
<td>Family and Society</td>
<td>3</td>
</tr>
<tr>
<td>SOC 235</td>
<td>Sociology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>SOC 242</td>
<td>Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 51

Organizational communication concentration, 30 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMM 351</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 441</td>
<td>Contemporary Issues in Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 452</td>
<td>Applied Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 465</td>
<td>Communication Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>COMM 489</td>
<td>Paid Professional Experience</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 479</td>
<td>Unpaid Professional Experience</td>
<td>1 TO 3</td>
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</tbody>
</table>

Directed electives, 6 credits from

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMM 251</td>
<td>Business and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 325</td>
<td>Interviewing</td>
<td>3</td>
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</table>

Subtotal: 51

Public communication concentration, 30 credits

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMM 330</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 340</td>
<td>Leadership Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 442</td>
<td>Communication and Conflict Management</td>
<td>3</td>
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</tbody>
</table>

6 credits from COMM other than COMM 210, COMM 475

Outside directed electives, 3 credits from

<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 213</td>
<td>Introduction to Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 231</td>
<td>Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENT 241</td>
<td>The Entrepreneurial Experience</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 373</td>
<td>Industrial Psychology</td>
<td>3</td>
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<td>SOC 329</td>
<td>Work and Society</td>
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Subtotal: 51

3 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AHS 264</td>
<td>Film Analysis</td>
<td>3</td>
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<tr>
<td>ANTH 342</td>
<td>Anthropology of the United States</td>
<td>3</td>
</tr>
<tr>
<td>ENG 213</td>
<td>Introduction to Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 328</td>
<td>Language and Gender</td>
<td>3</td>
</tr>
<tr>
<td>ENG 425</td>
<td>Film Studies</td>
<td>3</td>
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<tr>
<td>ENG 435</td>
<td>Issues in Rhetoric and Writing</td>
<td>3</td>
</tr>
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<td>HSC 180</td>
<td>Principles of Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HIST 240</td>
<td>Introduction to Public History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 301</td>
<td>The United States and the Vietnam War</td>
<td>3</td>
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<tr>
<td>PHIL 200</td>
<td>Symbolic Logic</td>
<td>3</td>
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<td>PHIL 202</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 203</td>
<td>Social Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 475</td>
<td>Minority Group Politics</td>
<td>3</td>
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</tbody>
</table>
SOC 221  Introduction to Race and Ethnic Relations  3  
SOC 235  Sociology of Gender  3  
SOC 242  Social Problems  3  

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<td>3</td>
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<td>SOC 235</td>
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<td>3</td>
</tr>
<tr>
<td>SOC 242</td>
<td>Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 51**

### MINOR IN CAMPAIGN COMMUNICATION

**24 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 320</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 404</td>
<td>Political Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 412</td>
<td>Rhetorical Theory and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 250</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>POLS 372</td>
<td>Political Campaigns</td>
<td>3</td>
</tr>
<tr>
<td>POLS 375</td>
<td>Media and Politics</td>
<td>3</td>
</tr>
</tbody>
</table>

3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 310</td>
<td>Communication and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>COMM 322</td>
<td>Communication and Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Presentational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 385</td>
<td>Rhetoric of Marginalized Voices</td>
<td>3</td>
</tr>
<tr>
<td>COMM 425</td>
<td>Speechwriting</td>
<td>3</td>
</tr>
<tr>
<td>COMM 479</td>
<td>Unpaid Professional Experience</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>JOUR 261</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 370</td>
<td>Public Opinion and Political Behavior</td>
<td>3</td>
</tr>
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<td>POLS 473</td>
<td>American Political Parties</td>
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**Subtotal: 24**

### MINOR IN COMMUNICATION STUDIES

**21 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMM 240</td>
<td>Introduction to Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 320</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Presentational Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

12 credits from electives in COMM other than COMM 210, COMM 475

**Subtotal: 12**

**Not open to communication studies majors.**

### MINOR IN MANAGEMENT AND ORGANIZATIONAL COMMUNICATION

**21 CREDITS**

*Open only to majors in communication studies (concentration 1), or majors in human resource management, entrepreneurial management, or business administration (concentration 2), or other majors with permission from chair of the Department of Communication Studies (concentration 3). Only 3 credits from a student’s major may count in any concentration of the minor.*

Concentration 1: For majors in communication studies, 21 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 201</td>
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<td>3</td>
</tr>
<tr>
<td>ENT 241</td>
<td>The Entrepreneurial Experience</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 361</td>
<td>Foundations of Human Resource Management and Employee Relations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 363</td>
<td>Talent Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 467</td>
<td>Leadership and Change Management</td>
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**Subtotal: 18**

3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 251</td>
<td>Business and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 325</td>
<td>Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 330</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 340</td>
<td>Leadership Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 351</td>
<td>Organizational Communication</td>
<td>3</td>
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**Subtotal: 3**

Concentration 2: For majors in human resource management, entrepreneurial management, or business administration, 21 credits

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMM 251</td>
<td>Business and Professional Communication</td>
<td>3</td>
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<tr>
<td>COMM 325</td>
<td>Interviewing</td>
<td>3</td>
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<tr>
<td>COMM 330</td>
<td>Small Group Communication</td>
<td>3</td>
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<tr>
<td>COMM 340</td>
<td>Leadership Communication</td>
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<td>COMM 351</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
<td>3</td>
</tr>
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</table>

**Subtotal: 21**
The Department of Journalism offers professional programs in advertising, journalism, graphics, magazine media, news, photojournalism, public relations, and teacher education. Departmental majors in advertising, journalism and public relations are accredited by the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC). The public relations major is certified by the Public Relations Society of America (PRSA). Journalism students receive individual attention and hands-on instruction using leading-edge communication technologies. Students are encouraged to supplement their classroom educations by working with award-winning student publications and organizations, including the Daily News (campus newspaper), Ball Bearings (student magazine), The McKinley Avenue Agency (student-operated integrated strategic communication agency), Cardinal Communications at The McKinley Avenue Agency (student-operated creative communications firm), and ballstatedaily.com (student media Web site). The department’s professional and faculty advisors assist students in selecting courses, understanding requirements for majors, and receiving career counseling. No more than 12 transfer credits are accepted for any major in the Department of Journalism.

For more information, contact the Department of Journalism at 765-285-8200.

**Baccalaureate Degrees**

Students will be guided by the outline of baccalaureate degrees, the University Core Curriculum, the majors and the concentration areas listed below. Students majoring in the journalism department are encouraged to meet with an advisor in advertising, journalism, or public relations within the first semester of the program.

Students must complete all major and minor courses with the grades of C or better, including concentration courses outside the department. Before enrolling in an EMDD, ICOM, JOUR, NEWS, or TCOM course, a student must earn a C or better grade in its prerequisites. Prerequisites for all courses are strictly enforced. Prior to graduation, majors must complete a senior survey, an exit exam, and an exit interview with the appropriate program coordinator. Before enrollment in JOUR 265, JOUR 354 or NEWS 120, students must successfully complete a language usage proficiency examination. Successful completion of this examination does not satisfy the University Core Curriculum Writing Proficiency Program requirement.

Students must earn a minimum of 72 credits in courses outside the journalism and telecommunications departments (EMDD, ICOM, JOUR, NEWS and TCOM). Students pursuing the news concentration are required to complete four semesters or the equivalent of one modern or classical language.
Students enrolled in the magazine media and news concentrations are required to complete a second major or minor outside the departments of journalism and telecommunications. Other journalism department majors are encouraged to select a second major or minor that will complement their major. Students may not select a second major or minor from the Department of Journalism.

MAJOR IN ADVERTISING (BA/BS)

48 CREDITS

Required Courses

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<thead>
<tr>
<th>Course</th>
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<td>Media and Society</td>
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<td>JOUR 103</td>
<td>Introduction to Media Design</td>
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<td>JOUR 250</td>
<td>Introduction to Advertising</td>
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<td>JOUR 285</td>
<td>Account Management</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 302</td>
<td>Diversity and Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 348</td>
<td>Strategic Communications and Emerging Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 352</td>
<td>Media Planning I</td>
<td>3</td>
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<tr>
<td>JOUR 354</td>
<td>Advertising Copy &amp; Layout I</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 355</td>
<td>Branding for Advertising and Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 369</td>
<td>Internship</td>
<td>0 TO 12</td>
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<tr>
<td>JOUR 382</td>
<td>Media Theory and Research</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 456</td>
<td>Advertising Campaigns</td>
<td>3</td>
</tr>
<tr>
<td>NEWS 105</td>
<td>Journalistic Storytelling: Introduction</td>
<td>3</td>
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<td>NEWS 449</td>
<td>Legal and Ethical Issues</td>
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Select 3 credits from

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Subtotal: 48

Select 3 credits from

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<tr>
<td>JOUR 452</td>
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<td>JOUR 454</td>
<td>Advertising Copy &amp; Layout 2</td>
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Students majoring in advertising may add one or more optional concentration areas. If selecting multiple areas or minors outside the journalism department, no more than three credits may overlap. Students selecting an optional concentration area must still complete at least 72 credits in areas outside ICOM, JOUR, NEWS, and TCOM.

Advertising Sales, 15 credits

Open only to advertising majors

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<tr>
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<td>Principles of Marketing</td>
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<td>MKG 325</td>
<td>Professional Selling</td>
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<tr>
<td>TCOM 340</td>
<td>Electronic Media Sales</td>
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<td>TCOM 344</td>
<td>Electronic Media Promotion</td>
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3 credits from

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<tr>
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<th>Credits</th>
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<td>Survey of Economic Ideas</td>
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<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
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Subtotal: 15

Communication Studies, 12 credits

Not open to students minoring in communication studies

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<td>COMM 290</td>
<td>Intercultural Communication</td>
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<td>COMM 320</td>
<td>Persuasion</td>
<td>3</td>
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<td>COMM 322</td>
<td>Communication and Popular Culture</td>
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Subtotal: 12

Emerging Media, 12 credits

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<tr>
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<tr>
<td>EMDD 375</td>
<td>Digital Storytelling</td>
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6 credits from

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<tr>
<td>EMDD 201</td>
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<tr>
<td>EMDD 210</td>
<td>Introduction to Social Media</td>
<td>3</td>
</tr>
<tr>
<td>EMDD 211</td>
<td>Interactivity Design</td>
<td>3</td>
</tr>
<tr>
<td>EMDD 212</td>
<td>Digital Image Design</td>
<td>3</td>
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<tr>
<td>EMDD 213</td>
<td>Digital Video Design</td>
<td>3</td>
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<tr>
<td>EMDD 214</td>
<td>Digital Sound Design</td>
<td>3</td>
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<td>EMDD 215</td>
<td>Usability</td>
<td>3</td>
</tr>
<tr>
<td>EMDD 216</td>
<td>Design Thinking</td>
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Subtotal: 12

Event Planning and Management, 12 credits

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<tr>
<td>HOSP 210</td>
<td>Customer Service</td>
<td>3</td>
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<tr>
<td>HOSP 262</td>
<td>Facilities Planning, Layout and Design</td>
<td>3</td>
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<tr>
<td>HOSP 376</td>
<td>Introduction to Event Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 477</td>
<td>Advanced Event Management</td>
<td>3</td>
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</table>

Subtotal: 12
Journalistic Narrative Writing, 12 credits
- JOUR 280 Writing for Magazines 3
- JOUR 328 Magazine Feature Writing 3
- JOUR 380 Long-form Digital Storytelling 3
- JOUR 427 Advanced Narrative Writing 3

Subtotal: 12

Media Analytics, 9 credits
- JOUR 182 Media Analytics and Content Strategy 3
- JOUR 282 Media Analytics Metrics 3
- JOUR 482 Media Analytics in Practice 3

Subtotal: 9

Media Presentation and Design, 15 credits
- JOUR 206 Introduction to Digital Media 3
- JOUR 234 Information Design I 3
- JOUR 241 Information Design II 3
- JOUR 242 Programming for Interactive Media 3
- JOUR 320 Information Design III 3

Subtotal: 15

Photojournalism, 12 credits
- JOUR 235 Introduction to Photojournalism 3
- JOUR 236 Photojournalism Lighting 3
- JOUR 335 Assignment Photojournalism 3

3 credits from
- JOUR 332 Photojournalism Managing and Editing 3
- JOUR 434 Advanced Photojournalism Illustration 3
- JOUR 437 Long-form Photojournalism 3

Subtotal: 12

Sport Marketing and Communication, 15 credits
Open only by permission of the Department of Journalism
- MKG 300 Principles of Marketing 3
- SPTA 190 Introduction to Sport Administration 3

3 credits from
- ECON 116 Survey of Economic Ideas 3
- ECON 201 Elementary Microeconomics 3
6 credits from SPTA

Subtotal: 15

Subtotal: 48

MAJOR IN JOURNALISM (BA/BS)
46-48 CREDITS

Core, 18 credits
- CCIM 210 Professional Development 1
- JOUR 101 Media and Society 3
- JOUR 103 Introduction to Media Design 3
- JOUR 302 Diversity and Media 3
- JOUR 369 Internship 0 TO 12
- NEWS 105 Journalistic Storytelling: Introduction 3
- NEWS 449 Legal and Ethical Issues 3

Subtotal: 18

Journalism Graphics: Information Design and Prototyping concentration, 28 credits
Not open to students in other journalism graphics concentration areas
- EMDD 216 Design Thinking 3
- JOUR 206 Introduction to Digital Media 3
- JOUR 234 Information Design I 3
- JOUR 235 Introduction to Photojournalism 3
- JOUR 241 Information Design II 3
- JOUR 320 Information Design III 3
- JOUR 323 Media Design and Branding 3
- JOUR 345 Data Analysis and Visualization 3
- NEWS 120 Newsgathering: Sourcing 2
- NEWS 215 News Editing 2

Subtotal: 28

Journalism Graphics: Media Development and Design concentration, 28 credits
Not open to students in other journalism graphics concentration areas

Subtotal: 28
EMDD 215  Usability  3
JOUR 206  Introduction to Digital Media  3
JOUR 234  Information Design I  3
JOUR 235  Introduction to Photojournalism  3
JOUR 241  Information Design II  3
JOUR 242  Programming for Interactive Media  3
JOUR 323  Media Design and Branding  3
JOUR 345  Data Analysis and Visualization  3
NEWS 120  Newsgathering: Sourcing  2
NEWS 215  News Editing  2

Journalism Graphics: Media Development and Analytics concentration, 28 credits

Not open to students in other journalism graphics concentration areas

JOUR 182  Media Analytics and Content Strategy  3
JOUR 206  Introduction to Digital Media  3
JOUR 234  Information Design I  3
JOUR 235  Introduction to Photojournalism  3
JOUR 242  Programming for Interactive Media  3
JOUR 282  Media Analytics Metrics  3
JOUR 345  Data Analysis and Visualization  3
JOUR 482  Media Analytics in Practice  3
NEWS 120  Newsgathering: Sourcing  2
NEWS 215  News Editing  2

Mass communication concentration, 30 credits

EMDD 101  The Digital World  3
EMDD 210  Introduction to Social Media  3
JOUR 250  Introduction to Advertising  3
JOUR 261  Principles of Public Relations  3
JOUR 382  Media Theory and Research  3

3 credits from

JOUR 182  Media Analytics and Content Strategy  3
JOUR 282  Media Analytics Metrics  3
JOUR 482  Media Analytics in Practice  3

News concentration, 30 credits (BA only)

NEWS 108  Foundations of Journalism: Great Stories and Storytellers  1
NEWS 109  Foundations of Journalism: Ethical and Legal Principles  1
NEWS 120  Newsgathering: Sourcing  2
NEWS 131  Multimedia: Stills  1
NEWS 132  Multimedia: Audio  1
NEWS 133  Multimedia: Video  1
NEWS 215  News Editing  2
NEWS 221  Journalistic Storytelling: Covering Issues  3
NEWS 233  Specialized Story Form Strategy  3
NEWS 397  Immersion: Special Topics  3

6 credits from

JOUR 311  News Feature Writing  3
JOUR 312  Opinion Writing  3
JOUR 322  Sportswriting and Reporting  3
NEWS 418  Specialty Reporting  2 TO 6

TCOM 324  News Videography  3
TCOM 326  Presentation Techniques  3
TCOM 426  Electronic News Producing  3

Subtotal: 29
3 credits from
JOUR 413 Advanced Newswriting and Reporting 3
TCOM 422 Advanced Video and Audio Reporting 3

3 credits from
JOUR 182 Media Analytics and Content Strategy 3
JOUR 282 Media Analytics Metrics 3
JOUR 482 Media Analytics in Practice 3

Subtotal: 30

Photojournalism concentration, 28 credits
JOUR 206 Introduction to Digital Media 3
JOUR 235 Introduction to Photojournalism 3
JOUR 236 Photojournalism Lighting 3
JOUR 332 Photojournalism Managing and Editing 3
JOUR 335 Assignment Photojournalism 3
JOUR 434 Advanced Photojournalism Illustration 3
JOUR 437 Long-form Photojournalism 3
NEWS 120 Newsgathering: Sourcing 2
NEWS 215 News Editing 2

Total Credit Hours: 46-48

MAJOR IN PUBLIC RELATIONS (BA/BS)

48 CREDITS

Required Courses
CCIM 210 Professional Development 1
JOUR 101 Media and Society 3
JOUR 103 Introduction to Media Design 3
JOUR 261 Principles of Public Relations 3
JOUR 265 Public Relations Writing and Publicity Techniques 3
JOUR 285 Account Management 3
JOUR 302 Diversity and Media 3
JOUR 348 Strategic Communications and Emerging Media 3
JOUR 355 Branding for Advertising and Public Relations 3
JOUR 369 Internship 0 TO 12
JOUR 382 Media Theory and Research 3
JOUR 405 Strategic Communications Case Studies 3
JOUR 465 Public Relations Campaigns 3
NEWS 105 Journalistic Storytelling: Introduction 3
NEWS 449 Legal and Ethical Issues 3

Subtotal: 48

Students majoring in public relations may add one or more optional concentration areas. If selecting multiple concentration areas or minors outside the department of journalism, no more than three credits may overlap. Students selecting an optional concentration area must still complete at least 72 credits in areas outside of ICOM, JOUR, NEWS and TCOM.

Advertising, 15 credits
JOUR 250 Introduction to Advertising 3
JOUR 352 Media Planning 1 3
JOUR 354 Advertising Copy & Layout 1 3
JOUR 485 Strategic Communications Campaigns 3

Subtotal: 15

Communication Studies 12 credits
Not open to students minoring in communication studies
COMM 240 Introduction to Interpersonal Communication 3
COMM 290 Intercultural Communication 3
COMM 320 Persuasion 3
COMM 322 Communication and Popular Culture 3
COMM 351 Organizational Communication 3

Subtotal: 12

Emerging Media, 12 credits
EMDD 101 The Digital World 3
EMDD 375 Digital Storytelling 3
6 credits from
EMDD 201  Web Design and Usability  3
EMDD 210  Introduction to Social Media  3
EMDD 211  Interactivity Design  3
EMDD 212  Digital Image Design  3
EMDD 213  Digital Video Design  3
EMDD 214  Digital Sound Design  3
EMDD 215  Usability  3
EMDD 216  Design Thinking  3
Subtotal: 12

Event Planning and Management, 12 credits
HOSP 210  Customer Service  3
HOSP 262  Facilities Planning, Layout and Design  3
HOSP 376  Introduction to Event Management  3
HOSP 477  Advanced Event Management  3
Subtotal: 12

Journalistic Narrative Writing, 12 credits
JOUR 280  Writing for Magazines  3
JOUR 328  Magazine Feature Writing  3
JOUR 380  Long-form Digital Storytelling  3
JOUR 427  Advanced Narrative Writing  3
Subtotal: 12

Media Analytics, 9 credits
JOUR 182  Media Analytics and Content Strategy  3
JOUR 282  Media Analytics Metrics  3
JOUR 482  Media Analytics in Practice  3
Subtotal: 9

Media Presentation and Design, 15 credits
JOUR 206  Introduction to Digital Media  3
JOUR 234  Information Design I  3
JOUR 241  Information Design II  3
JOUR 242  Programming for Interactive Media  3
JOUR 320  Information Design III  3
Subtotal: 15

Photojournalism, 12 credits
JOUR 235  Introduction to Photojournalism  3
JOUR 236  Photojournalism Lighting  3
JOUR 335  Assignment Photojournalism  3

3 credits from
JOUR 332  Photojournalism Managing and Editing  3
JOUR 434  Advanced Photojournalism Illustration  3
JOUR 437  Long-form Photojournalism  3
Subtotal: 12

Sport Marketing and Communication, 15 credits
MKG 300  Principles of Marketing  3
SPTA 190  Introduction to Sport Administration  3
Subtotal: 12

3 credits from
ECON 116  Survey of Economic Ideas  3
ECON 201  Elementary Microeconomics  3
6 credits from SPTA 6
Subtotal: 15

Subtotal: 48
Total Credit Hours: 48

MINOR IN DIGITAL MEDIA
18 CREDITS
Required Courses
EMDD 101  The Digital World  3
EMDD 215  Usability  3
EMDD 375  Digital Storytelling  3
9 credits from
EMDD 201  Web Design and Usability  3
EMDD 210  Introduction to Social Media  3
EMDD 211  Interactivity Design  3
EMDD 212  Digital Image Design  3
EMDD 213  Digital Video Design  3
EMDD 214  Digital Sound Design  3
EMDD 216  Design Thinking  3
EMDD 299X  Experimental/Development Topics  3
EMDD 390  Independent Studies in Digital Media  3
EMDD 495  Senior Capstone  3
Subtotal: 9

Subtotal: 18
C or better grades required in each course. This program is offered on-line only.
MINOR IN JOURNALISTIC STORYTELLING

22 CREDITS

Requirements List

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<td>Journalistic Storytelling: Introduction</td>
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<tr>
<td>NEWS 109</td>
<td>Foundations of Journalism: Ethical and Legal Principles</td>
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<td>NEWS 120</td>
<td>Newsgathering: Sourcing</td>
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<td>NEWS 132</td>
<td>Multimedia: Audio</td>
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<td>NEWS 133</td>
<td>Multimedia: Video</td>
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<td>News Editing</td>
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<td>NEWS 418</td>
<td>Specialty Reporting</td>
<td>2 TO 6</td>
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<td>TCOM 324</td>
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<td>Presentation Techniques</td>
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<td>TCOM 426</td>
<td>Electronic News Producing</td>
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Subtotal: 22

MINOR IN SPORTS STUDIES

16 CREDITS

Requirements List

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<td>NEWS 418</td>
<td>Specialty Reporting</td>
<td>2 TO 6</td>
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<td>TCOM 383</td>
<td>Digital Sports Seminar</td>
<td>3 TO 6</td>
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<td>JOUR 322</td>
<td>Sportswriting and Reporting</td>
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<td>NEWS 418</td>
<td>Specialty Reporting</td>
<td>2 TO 6</td>
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<td>TCOM 383</td>
<td>Digital Sports Seminar</td>
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<td>HIST 205</td>
<td>Introduction to Sport in American Life</td>
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<td>PHIL 304</td>
<td>Philosophy of Sport</td>
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<td>SPST 250</td>
<td>Special Topics in Sports Studies</td>
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<td>SPTA 300</td>
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<td>Sport Finance</td>
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<td>Sport Communication</td>
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Subtotal: 6

MINOR IN STRATEGIC COMMUNICATIONS

15 CREDITS

Requirements List

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<td>JOUR 261</td>
<td>Principles of Public Relations</td>
<td>3</td>
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<tr>
<td>NEWS 105</td>
<td>Journalistic Storytelling: Introduction</td>
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Subtotal: 9

No course in the Minor in Sports Studies may count toward majors in Journalism, Telecommunications, or Sports Administration. Open to declared majors in Journalism or Telecommunications, and to other majors with permission of the journalism chair.

Subtotal: 16

TEACHING MAJOR IN JOURNALISM (BA/BS)

79 CREDITS

Required Courses

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<thead>
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<th>Course</th>
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<tr>
<td>EDSE 320</td>
<td>Reading for Diverse Learners in Secondary Content Classes</td>
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<td>JOUR 101</td>
<td>Media and Society</td>
<td>3</td>
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<tr>
<td>JOUR 103</td>
<td>Introduction to Media Design</td>
<td>3</td>
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<tr>
<td>JOUR 234</td>
<td>Information Design I</td>
<td>3</td>
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<tr>
<td>JOUR 235</td>
<td>Introduction to Photojournalism</td>
<td>3</td>
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<td>JOUR 280</td>
<td>Writing for Magazines</td>
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<td>JOUR 320</td>
<td>Information Design III</td>
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<td>NEWS 105</td>
<td>Journalistic Storytelling: Introduction</td>
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<td>NEWS 108</td>
<td>Foundations of Journalism: Great Stories and Storytellers</td>
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<tr>
<td>NEWS 109</td>
<td>Foundations of Journalism: Ethical and Legal Principles</td>
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</tbody>
</table>
TELECOMMUNICATIONS

M. Spillman, Interim Chairperson

bsu.edu/tcom

The Department of Telecommunications (TCOM) offers programs and courses designed to prepare students for 21st century careers in multiple media industries. Students can choose from these concentrations:

**Digital production**—Offers skills and applications courses using digital technology to create content for distribution across multiple platforms, including interactive and mobile media, tablets, podcasts, and the Web, plus television, radio, and film. Concentration areas include digital audio, digital video, emerging media, and digital sports production (requires application to be accepted). Prepares students for careers in developing and changing media arenas.

**Film and media studies**—Offers courses examining relationships between visual media and society, focusing on critical thinking and multiple academic approaches. Designed for students interested in graduate studies in film, electronic media, and related fields.

**News**—Offers courses in ethically gathering, preparing and presenting news via emerging and traditional media, focusing on telling fair, relevant, compelling stories with words, moving and still images and sound. This program is offered jointly with the Department of Journalism. Prepares students for careers encompassing a range of electronic platforms.

**Sales and promotion**—Offers courses in the theory and practice of selling and promoting media time and content. Prepares students for careers in sales, promotion, and management.

TCOM emphasizes experiential and immersive learning through media facilities managed by students and professional staff. The department has a history of providing practical learning opportunities through internships at numerous media outlets, including broadcast operations, film studios, ad agencies, and production facilities. The department’s honors include student Academy Awards® and more than 60 regional Emmy® winners, plus awards from the Society of Professional Journalists, Radio Television Digital News Association, Indiana Association of School Broadcasters, College Sports Video Summit, the Heartland Film Festival, and the Indianapolis International Film Festival.
Before becoming a Telecommunications major or minor, students complete the pre-Telecommunications core of TCOM 101, 204, 206, 207, and 284. (Students in the news concentration do not take courses in the pre-TCOM core.) A grade of C (2.0) in each pre-TCOM course and an overall grade-point average of 2.5 in the pre-TCOM core courses are required. Majors cannot choose more than one concentration in the department, but are eligible to select the Film/Screenwriting minor or the Minor in Sports Studies (see below). Telecommunications courses generally are open only to declared departmental majors, minors, or pre-TCOM students.

To graduate as a Telecommunications major or minor, students must earn a grade of C (2.0) or above in all courses required by the department (pre-TCOM and concentration, including concentration classes outside the department). All Telecommunications majors also must earn credit in four semesters or the equivalent of one modern or classical language or American Sign Language (ASL); all Telecommunications minors must earn credit in two semesters or the equivalent of one modern or classical language, or ASL. Students may earn credit for previous language study through placement tests administered by the Department of Modern Languages and Classics. Film/Screenwriting minors not majoring in TCOM have no departmental language requirement. Department policies pertaining to TCOM credit older than seven years is available from the department chair.

Minor in Film/Screenwriting—An 18-credit minor offered jointly by TCOM and the Department of English that includes 9 credits from each department. The minor is open to all students except TCOM majors in Film and Media Studies; only ENG 285 may count in both the minor and any TCOM or English major. Film/Screenwriting minors not majoring in TCOM have no departmental language requirement.

Minor in Sports Studies—An 18-credit minor offered jointly by TCOM and the Department of Journalism. The minor is open to declared majors in Journalism or Telecommunications, and to other majors with permission of the journalism chair. No course in the minor may count toward a major in Journalism, Telecommunications, or Sports Administration. Sports Studies minors not majoring in TCOM or Journalism News have no departmental language requirement. For information, contact TCOM Associate Professor Suzy Smith (sjsmith@bsu.edu).

Department of Telecommunications Transfer Policy
No more than 6 transfer credits are accepted in any Telecommunications major or minor, and transfer credits are limited to 100- and 200-level courses. All TCOM courses at the 300- and 400-levels must be completed at Ball State University.

MAJOR IN TELECOMMUNICATIONS (BA)

45-47 credits
The news concentration is a joint program of the telecommunications and journalism departments. TCOM students choosing the news concentration should meet with a faculty advisor in journalism or telecommunications during their first semester in the program. Students also are required to attend an orientation during the first year of study and complete an exit interview with the appropriate department coordinator during their final semester. Pre-telecommunications core courses are not required of TCOM students choosing the news concentration. Students must earn a grade of C (2.0) or above in all courses required in news, including all prerequisites. Prerequisites for all courses are strictly enforced. Before enrolling in NEWS 120, students must successfully complete the language usage proficiency examination (LUPE). Successful completion of this examination does not satisfy the University Core Curriculum Writing Proficiency Program requirement.

News students must earn a minimum of 72 credits in courses outside the departments of journalism and telecommunications (JOUR, NEWS, and TCOM). News students also are required to complete four semesters or the equivalent of a single modern or classical language.

PRE-TELECOMMUNICATIONS CORE

<table>
<thead>
<tr>
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<th>Credits</th>
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<tr>
<td>TCOM 101</td>
<td>Foundations of Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 204</td>
<td>Media Analysis and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 284</td>
<td>Practical Aspects of Media Law</td>
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<tr>
<td>2 credits from TCOM 206</td>
<td>Writing for Electronic Media: Scriptwriting</td>
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<tr>
<td>TCOM 207</td>
<td>Writing for Electronic Media: Copywriting</td>
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</table>

Subtotal: 9

Four semesters or equivalent of modern or classical language at the college level are required.

Complete one concentration
Digital production concentration, 36-38 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>TCOM 330</td>
<td>Beginning Digital Audio Production</td>
<td>3</td>
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<tr>
<td>TCOM 231</td>
<td>Media Aesthetics</td>
<td>1</td>
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<tr>
<td>TCOM 332</td>
<td>Beginning Digital Video Production</td>
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<td>TCOM 384</td>
<td>Electronic Media Law</td>
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<td>TCOM 408</td>
<td>Media Ethics and Social Responsibility</td>
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Subtotal: 15
Choose one concentration

**Digital production: Digital audio**
TCOM 333  Advanced Digital Audio Production  3
TCOM 433  Seminar in Digital Audio Production  3 TO 9

3 credits from
TCOM 334  Advanced Digital Video Production  3
TCOM 350  Motion Graphics and Design  3
TCOM 351  Web Development  3
TCOM 444  Management of Telecommunications  3
TCOM 450  Seminar in Emerging Media  3
TCOM 487  Seminar in Digital Video Production  3 TO 6
TCOM 499  Special Projects Seminar in Digital Production  3

**Subtotal: 9**

**Digital production: Digital sports production**
NEWS 105  Journalistic Storytelling: Introduction  3
NEWS 120  Newsgathering: Sourcing  2
TCOM 334  Advanced Digital Video Production  3
TCOM 381  Sports and Electronic Media  3
TCOM 383  Digital Sports Seminar  3 TO 6
TCOM 487  Seminar in Digital Video Production  3 TO 6

6 credits from
NEWS 221  Journalistic Storytelling: Covering Issues  3
SPTA 290  Revenue Generation in Sport  3
SPTA 345  Sport Communication  3
SPTA 402  Event and Facility Management in Sport  3

**Subtotal: 23**

**Digital audio, digital video, and emerging media concentrations also are required to take 6 credits from both of the following two groupings**

**Digital production: Digital video**

TCOM 334  Advanced Digital Video Production  3
TCOM 487  Seminar in Digital Video Production  3 TO 6

3 credits from
TCOM 333  Advanced Digital Audio Production  3

**Subtotal: 9**

**Digital production: Emerging media**

TCOM 350  Motion Graphics and Design  3
TCOM 351  Web Development  3
TCOM 450  Seminar in Emerging Media  3

**Subtotal: 9**

**Digital audio, digital video, and emerging media concentrations also are required to take 6 credits from both of the following two groupings**

6 credits from
ENG 213  Introduction to Digital Literacies  3
ENG 285  Introduction to Creative Writing  3
ENG 306  Creative Nonfiction Writing  3
ENG 307  Fiction Writing  3
ENG 310  Screenwriting  3
ENG 410  Advanced Screenwriting  3
ENG 425  Film Studies  3
ENG 306, ENG 307, and ENG 310 require ENG 285 as a prerequisite.
ENG 410 requires ENG 310 as a prerequisite.

6 credits from
ACC 201  Principles of Accounting 1  3
ACC 202  Principles of Accounting 2  3
BUSA 101  Introduction to Business  3
COMM 251  Business and Professional Communication  3
COMM 290  Intercultural Communication  3
COMM 310  Communication and Democracy  3
COMM 320  Persuasion  3
COMM 322  Communication and Popular Culture  3
COMM 330  Small Group Communication  3
COMM 375  Presentational Communication  3
ECON 201  Elementary Microeconomics  3
ECON 202  Elementary Macroeconomics  3
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<td>Managing Behavior in Organizations</td>
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<td>MKG 300</td>
<td>Principles of Marketing</td>
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<td>GCM 286</td>
<td>Graphics: Fundamentals of Photography</td>
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<td>GCM 387</td>
<td>Graphics: Applications of Commercial Photography</td>
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<td>THEA 103</td>
<td>Aesthetics of Theatre 1</td>
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<td>THEA 220</td>
<td>Stagecraft</td>
<td>3</td>
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<td>THEA 232</td>
<td>Acting 1</td>
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<td>THEA 233</td>
<td>Acting 2</td>
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<td>THEA 250</td>
<td>Directing 1</td>
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<td>Theatre and Dance Practicum</td>
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<td>Lighting Design and Technology 1</td>
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<td>TCOM 301</td>
<td>Emerging Media and Culture</td>
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<td>Television Studies</td>
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<td>TCOM 360</td>
<td>World Film History 1</td>
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<td>TCOM 363</td>
<td>Film Genres</td>
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<td>TCOM 365</td>
<td>History of Documentary Film</td>
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<td>TCOM 384</td>
<td>Electronic Media Law</td>
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<td>Seminar in Film Theory</td>
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<td>TCOM 322</td>
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<td>ENG 285</td>
<td>Introduction to Creative Writing</td>
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<td>ENG 310</td>
<td>Screenwriting</td>
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<td>ENG 410</td>
<td>Advanced Screenwriting</td>
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<td>ENG 425</td>
<td>Film Studies</td>
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<td>HIST 235</td>
<td>Historical Topics in Film</td>
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<td>TCOM 357</td>
<td>Special Topics in Film and Media Studies</td>
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<td>TCOM 361</td>
<td>World Film History 2</td>
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<td>TCOM 464</td>
<td>Controversy and Media Studies</td>
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<td>Programs and Audiences</td>
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<td>TCOM 340</td>
<td>Electronic Media Sales</td>
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<td>Electronic Media Promotion</td>
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<td>Advanced Media Sales and Promotion</td>
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<td>COMM 375</td>
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<td>ECON 116</td>
<td>Survey of Economic Ideas</td>
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<td>Elementary Microeconomics</td>
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<td>ENG 231</td>
<td>Professional Writing</td>
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<td>HOSP 376</td>
<td>Introduction to Event Management</td>
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<td>HOSP 477</td>
<td>Advanced Event Management</td>
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<tr>
<td>JOUR 250</td>
<td>Introduction to Advertising</td>
<td>3</td>
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<tr>
<td>JOUR 261</td>
<td>Principles of Public Relations</td>
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<td>JOUR 348</td>
<td>Strategic Communications and Emerging Media</td>
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<td>JOUR 352</td>
<td>Media Planning 1</td>
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<td>JOUR 355</td>
<td>Branding and Advertising</td>
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<td>MKG 320</td>
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<td>MKG 425</td>
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Subtotal: 45

ACC 202 requires ACC 201 with a minimum grade of C as a prerequisite. ECON 202 requires ECON 201 with a minimum grade of C as a prerequisite. THEA 232 as a prerequisite. THEA 250 requires THEA 103, and permission of the instructor as prerequisites.

Film and media studies concentration, 36 credits

Subtotal: 45-47

ENG 310 requires ENG 285 as a prerequisite. ENG 410 requires ENG 310 as a prerequisite.

Sales and promotion concentration, 36 credits

Subtotal: 45

Subtotal: 45

3 credits from

Subtotal: 45-47

ENG 310 requires ENG 285 as a prerequisite. ENG 410 requires ENG 310 as a prerequisite.

Sales and promotion concentration, 36 credits

Subtotal: 45

Subtotal: 45

Subtotal: 45-47

ACC 202 requires ACC 201 with a minimum grade of C as a prerequisite. ECON 202 requires ECON 201 with a minimum grade of C as a prerequisite. THEA 232 as a prerequisite. THEA 250 requires THEA 103, and permission of the instructor as prerequisites.
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<td>TCOM 347</td>
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**Subtotal: 45**

HOSP 477 requires HOSP 376 as a prerequisite. MKG 310, 320, requires MKG 300 as a prerequisite. MKG 420 requires MKG 300 as a prerequisite. MKG 425 requires MKG 300, 325 and permission of the department chairperson as a prerequisite. MKG 427 requires MKG 300 and 325 as prerequisites.

**NEWS CONCENTRATION, 47 CREDITS**

**Required Courses**

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<td>Media and Society</td>
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<td>JOUR 103</td>
<td>Introduction to Media Design</td>
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<td>JOUR 302</td>
<td>Diversity and Media</td>
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<td>JOUR 369</td>
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<td>Foundations of Journalism: Great Stories and Storytellers</td>
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<td>NEWS 109</td>
<td>Foundations of Journalism: Ethical and Legal Principles</td>
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<td>NEWS 120</td>
<td>Newsgathering: Sourcing</td>
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<td>NEWS 131</td>
<td>Multimedia: Stills</td>
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<td>NEWS 132</td>
<td>Multimedia: Audio</td>
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<td>NEWS 133</td>
<td>Multimedia: Video</td>
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<td>NEWS 197</td>
<td>Introduction to Student Media</td>
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<td>NEWS 215</td>
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<td>NEWS 221</td>
<td>Journalistic Storytelling: Covering Issues</td>
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<td>NEWS 233</td>
<td>Specialized Story Form Strategy</td>
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<td>NEWS 240</td>
<td>Current Issues 1</td>
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<td>NEWS 340</td>
<td>Current Issues 2</td>
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<td>NEWS 370</td>
<td>Media Analytics</td>
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<td>NEWS 397</td>
<td>Immersion: Special Topics</td>
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<td>NEWS 409</td>
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6 credits from

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<td>JOUR 311</td>
<td>News Feature Writing</td>
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<td>JOUR 312</td>
<td>Opinion Writing</td>
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<td>Sportwriting and Reporting</td>
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<td>NEWS 418</td>
<td>Specialty Reporting</td>
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<td>TCOM 324</td>
<td>News Videography</td>
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<td>Presentation Techniques</td>
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<td>TCOM 426</td>
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**Subtotal: 6**

2 credits from

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<tr>
<td>TCOM 422</td>
<td>Advanced Video and Audio Reporting</td>
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**Subtotal: 47**

**Total Credit Hours: 45-47**

**MINOR IN FILM/SCREENWRITING, 18 CREDITS**

**Required Courses**

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<tr>
<td>ENG 285</td>
<td>Introduction to Creative Writing</td>
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<td>ENG 310</td>
<td>Screenwriting</td>
<td>3</td>
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<td>TCOM 363</td>
<td>Film Genres</td>
<td>3</td>
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<td>TCOM 360</td>
<td>World Film History 1</td>
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<td>TCOM 361</td>
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3 credits from

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<td>ENG 425</td>
<td>Film Studies</td>
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<td>TCOM 365</td>
<td>History of Documentary Film</td>
<td>3</td>
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<td>TCOM 465</td>
<td>Seminar in Film Theory</td>
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3 credits from

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<th>Course Title</th>
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<tbody>
<tr>
<td>TCOM 360</td>
<td>World Film History 1</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 361</td>
<td>World Film History 2</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 365</td>
<td>History of Documentary Film</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

Minors in creative writing may count only ENG 285 in both minors. Majors in the TCOM digital production concentration may count only ENG 285 in both the major and minor.
The Minor in Film/Screenwriting is not open to TCOM majors in film and media studies concentration.

MINORS IN SPORTS STUDIES

16 CREDITS

Requirements List

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 322</td>
<td>Sportswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>NEWS 418</td>
<td>Specialty Reporting</td>
<td>2-6</td>
</tr>
<tr>
<td>TCOM 383</td>
<td>Digital Sports Seminar</td>
<td>3-6</td>
</tr>
</tbody>
</table>

9 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 205</td>
<td>Introduction to Sport in American Life</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 304</td>
<td>Philosophy of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SPST 250</td>
<td>Special Topics in Sports Studies</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 300</td>
<td>Sport Law</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 305</td>
<td>Sport Finance</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 345</td>
<td>Sport Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 448</td>
<td>Sport Governance</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

No course in the Minor in Sports Studies may count toward majors in Journalism, Telecommunications, or Sports Administration. Open to declared majors in Journalism or Telecommunications, and to other majors with permission of the journalism chair.

Subtotal: 16

MINOR IN TELECOMMUNICATIONS

24 CREDITS

Two semesters or equivalent of modern or classical language at the college level are required.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCOM 101</td>
<td>Foundations of Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 204</td>
<td>Media Analysis and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 206</td>
<td>Writing for Electronic Media: Scriptwriting</td>
<td>1</td>
</tr>
<tr>
<td>TCOM 207</td>
<td>Writing for Electronic Media: Copywriting</td>
<td>1</td>
</tr>
<tr>
<td>TCOM 284</td>
<td>Practical Aspects of Media Law</td>
<td>1</td>
</tr>
<tr>
<td>TCOM 384</td>
<td>Electronic Media Law</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 408</td>
<td>Media Ethics and Social Responsibility</td>
<td>3</td>
</tr>
</tbody>
</table>

9 credits from TCOM electives

Subtotal: 24
College of Fine Arts

S. Beckman, Dean; M. O’Hara, Associate Dean

www.bsu.edu/cfa

The College of Fine Arts promotes expertise in, awareness of, and appreciation for the fine arts among the students, the university community, and the public. Students and faculty members advocate for the arts at the local, regional, national, and international levels through education, exhibitions, consultation, collaboration, community engagement, and professional performance.

SCHOOL OF ART

Andy Beane, Interim Director

bsu.edu/art

The School of Art inspires and educates artists, designers, scholars and teachers. The School of Art offers the Bachelor of Fine Arts (BFA) degree with concentrations in animation, ceramics, drawing, glass, metals, painting, photography and intermedia art, printmaking, sculpture, and visual communication/graphic design, as well as a Bachelor of Arts (BA) or Bachelor of Science (BS) degree with licensure in Art Education. Students may also pursue a Bachelor of Arts (BA) degree in graphic communications management or in art with a concentration in either art history or studio art. Minors in art history, art studio, and graphic communications management also are available.

All concentration areas in the School of Art have fully dedicated studios and labs, including the state-of-the-art Marilyn Glick Center for Glass. The curriculum is complemented by a rich calendar of visiting artists, designers and scholars, as well as a full schedule of professional and student exhibitions in our Atrium Gallery. School of Art students and faculty also enjoy a close collaboration with the David Owsley Museum of Art on campus. Art majors have exceptional opportunities for internships, practicums, immersive learning, field trips and study abroad.

A portfolio is required for admittance to the BFA degree programs and for scholarship consideration. BA or BS degree students are not required to submit portfolios unless applying for art scholarships. All students in the school complete a common first-year foundation program of study comprised of required courses in drawing, 2d, 3d, 4d and art history.

- First-time freshmen submit both the university application and art program application indicating the degree and program of interest. Before final acceptance into any art program, applicants must first be admitted to the university.
- The School of Art Admission and Scholarship Committee carefully screens all BFA degree applicants and decides which students to admit into the program based upon a review of academic records and portfolio of original artwork.
- Currently enrolled studio art majors (BA degree) and students enrolled in other majors across campus who want to pursue a Bachelor of Fine Arts (BFA) degree in art must successfully complete the first year foundation studio courses (ADS 101, 102, 103; AFA 101) with a grade of C or higher.

Transfer students from other universities are required to submit portfolios to the School of Art as well as transcripts for evaluation and admittance to the BFA degree program. BA or BS degree students are only required to submit portfolios for course credit evaluation. Applications and portfolios for BFA degree program consideration can be submitted to meet the deadline for first-time freshmen.

- Transfer students specializing in any program must complete the first-year foundation core courses (ADS 101, 102, 103; AFA 101) before being admitted to areas of concentrations in the second year of study. For BFA students wishing to pursue a concentration in animation or visual communication & graphic design, it is unusual for students to be admitted at any point other than at the beginning of the three-year sequence of courses.
- Course Evaluation for Transfer Students. Additionally, transfer students from other universities are required to submit a portfolio of artwork and course syllabi to determine art program credit. We recommend transfer students keep course syllabi, project descriptions, and sketchbooks; preserve artwork or projects from each course (actual work or digital images); bring all materials for any review process; and to follow through with any part of the course evaluation process that was not completed at the first meeting. Students specializing in any art program must receive grades of C or higher in all first-year foundation core courses (ADS 101, 102, 103; AFA 101) before enrolling in advanced level courses. Students must repeat courses in which they receive grades of C- or below. Students that meet the grade requirement will then select an area of concentration for the second through fourth years of study. Concentrations involve a three-year sequence of courses beyond the first-year foundation core.

- Animation (BFA degree) – Successful completion of a second portfolio review is required for admission into the Animation concentration. The artwork for this review must come from college level art courses. Review guidelines are revised periodically and made available through the School of Art.
• Visual Communication/Graphic Design (BFA degree) – Successful completion of a second portfolio review is required for admission into the Visual Communication/Graphic Design concentration. The artwork for this review must come from college level art courses. Review guidelines are revised periodically and made available through the School of Art.

• Visual Arts Education (BA/BS degree) – Students wanting to pursue a teaching major must meet all teacher certification and GPA requirements. An art portfolio is not required unless applying for art scholarships. Students are encouraged to meet with a faculty advisor.

All students in the school undergo periodic reviews of their portfolios throughout their undergraduate education. The school reserves the right to retain digital copies of student work for exhibition and accreditation. All concentrations require a senior thesis and/or an exit portfolio evaluation, presentation or exhibition.

Students are strongly advised to pursue required course sequences during the regular academic year. Summer school courses are limited and are subject to last minute changes or cancellations.

All students may enroll in art history courses based on the completion of the prerequisites. Minors are not required to submit an art application but must receive approval from the School of Art. Minors may begin art courses in the spring or summer term.

Most studio art courses (ACR, ADS, AFA, ART) are open only to art majors and minors except by permission of the director of the school.

Ball State University is accredited by the National Association of Schools of Art and Design.

For more information, visit the School of Art website or call 765-285-5838.

MAJOR IN ART (BA)

43-49 CREDITS

ART HISTORY CONCENTRATION, 43 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 101</td>
<td>Introduction to Art History: Global Traditions</td>
<td>3</td>
</tr>
<tr>
<td>AHS 102</td>
<td>Introduction to Art History: The Modern and Contemporary World</td>
<td>3</td>
</tr>
<tr>
<td>AHS 201</td>
<td>Art Criticism and Meaning</td>
<td>3</td>
</tr>
<tr>
<td>ART 100</td>
<td>Art Orientation</td>
<td>1</td>
</tr>
<tr>
<td>3 credits from Asian, African, Islamic, Latin American Mexican Art</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AHS 281</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

AHS 285 | African Art | 3 |
AHS 290 | Asian Art | 3 |
AHS 295 | Islamic Art | 3 |
AHS 302 | Special Topics in Art History: Asian, African, Islamic, or Latin American | 3 |

Subtotal: 3

3 credits from Ancient to Early Modern Europe

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 230</td>
<td>Ancient Art</td>
<td>3</td>
</tr>
<tr>
<td>AHS 241</td>
<td>Gothic Art</td>
<td>3</td>
</tr>
<tr>
<td>AHS 251</td>
<td>Italian Renaissance Art</td>
<td>3</td>
</tr>
<tr>
<td>AHS 252</td>
<td>Baroque and Rococo Art</td>
<td>3</td>
</tr>
<tr>
<td>AHS 303</td>
<td>Special Topics in Art History: Ancient to Early Modern Europe</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

3 credits from Modern and Contemporary

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 220</td>
<td>Art in the United States</td>
<td>3</td>
</tr>
<tr>
<td>AHS 253</td>
<td>Neoclassicism and Romanticism</td>
<td>3</td>
</tr>
<tr>
<td>AHS 255</td>
<td>Impressionism and Post-Impressionism</td>
<td>3</td>
</tr>
<tr>
<td>AHS 261</td>
<td>Modern Art</td>
<td>3</td>
</tr>
<tr>
<td>AHS 263</td>
<td>Contemporary Art</td>
<td>3</td>
</tr>
<tr>
<td>AHS 264</td>
<td>Film Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AHS 265</td>
<td>Feminist Art History</td>
<td>3</td>
</tr>
<tr>
<td>AHS 275</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>AHS 304</td>
<td>Special Topics in History of Art: American, Modern, and Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>AHS 310</td>
<td>History of Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>AHS 311</td>
<td>History of Three-Dimensional Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

6 credits from 200-, 300-, and 400-level AHS courses

Subtotal: 6

3 credits research support elective

A course in art history (200/300/400-level), studio art (not non-major classes), or another related discipline like psychology, history, women’s studies, etc. that supports the student’s research interests. If the course is outside the School of Art, it must be approved by art history faculty.

Subtotal: 3

6 credits from 400-level AHS courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 450</td>
<td>Art Museum Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>AHS 455</td>
<td>Seminar in Art History</td>
<td>3</td>
</tr>
</tbody>
</table>
# AHS 456  Capstone Seminar in Art History  3
# AHS 480  Art History Senior Thesis  3

**Subtotal: 6**

9 credits from art studio electives

**Subtotal: 9**

Subtotal: 43

## Studio Art Concentration, 49 Credits

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101</td>
<td>2D Foundations Studio</td>
<td>3</td>
</tr>
<tr>
<td>ADS 102</td>
<td>3D Foundations Studio</td>
<td>3</td>
</tr>
<tr>
<td>ADS 103</td>
<td>4D Foundations Studio</td>
<td>3</td>
</tr>
<tr>
<td>AFA 101</td>
<td>Drawing Studio</td>
<td>3</td>
</tr>
<tr>
<td>AHS 101</td>
<td>Introduction to Art History: Global Traditions</td>
<td>3</td>
</tr>
<tr>
<td>AHS 102</td>
<td>Introduction to Art History: The Modern and Contemporary World</td>
<td>3</td>
</tr>
<tr>
<td>ART 100</td>
<td>Art Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ART 200</td>
<td>Introduction to Computer Art</td>
<td>3</td>
</tr>
</tbody>
</table>

3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 418</td>
<td>Ceramics: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>ACR 428</td>
<td>Metals: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>ACR 438</td>
<td>Glass: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>AFA 487</td>
<td>Drawing: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>AFA 489</td>
<td>Painting: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>AFA 491</td>
<td>Sculpture: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>AFA 493</td>
<td>Printmaking: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>ART 480</td>
<td>Senior Project in Photography and Intermedia Art</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

12 credits from single area of emphasis as approved by the department.
Areas include: ceramics, drawing, glass, metals, painting, photography, printmaking, or sculpture.

**Subtotal: 12**

6 credits from 200-, 300-, and 400-level AHS courses

**Subtotal: 6**

6 credits from art studio electives

**Subtotal: 6**

Subtotal: 49

Subtotal: 43-49

AHS 101 satisfies the fine arts distribution requirement in the University Core Curriculum. This program leads to a BA degree (see Academic Programs (p. 20) for degree outline).

## MAJOR IN ART (BFA)

### 85 CREDITS

AHS 101 satisfies the fine arts distribution requirement in the University Core Curriculum.

### Core requirements, 25 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101</td>
<td>2D Foundations Studio</td>
<td>3</td>
</tr>
<tr>
<td>ADS 102</td>
<td>3D Foundations Studio</td>
<td>3</td>
</tr>
<tr>
<td>ADS 103</td>
<td>4D Foundations Studio</td>
<td>3</td>
</tr>
<tr>
<td>AFA 101</td>
<td>Drawing Studio</td>
<td>3</td>
</tr>
<tr>
<td>AHS 101</td>
<td>Introduction to Art History: Global Traditions</td>
<td>3</td>
</tr>
<tr>
<td>AHS 102</td>
<td>Introduction to Art History: The Modern and Contemporary World</td>
<td>3</td>
</tr>
<tr>
<td>ART 100</td>
<td>Art Orientation</td>
<td>1</td>
</tr>
</tbody>
</table>

6 credits from 200-, 300-, and 400-level AHS courses

**Subtotal: 25**

## Complete One Professional Concentration:

### Animation, 60 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 202</td>
<td>Drawing: The Figure</td>
<td>3</td>
</tr>
<tr>
<td>AFA 211</td>
<td>Painting: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ART 210</td>
<td>Animation: Introduction to 3D</td>
<td>3</td>
</tr>
<tr>
<td>ART 211</td>
<td>Traditional Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART 311</td>
<td>Animation: 3D Modeling, Texturing, Lighting, and Rendering</td>
<td>3</td>
</tr>
<tr>
<td>ART 312</td>
<td>Animation: 3D Animation, Rigging, and Simulation</td>
<td>3</td>
</tr>
<tr>
<td>ART 313</td>
<td>Animation: Specialty</td>
<td>3</td>
</tr>
<tr>
<td>ART 314</td>
<td>Animation: Experimental Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ART 315</td>
<td>Animation: Character Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 316</td>
<td>Animation: Storyboarding</td>
<td>3</td>
</tr>
<tr>
<td>ART 411</td>
<td>Animation: Pre-Production</td>
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</tr>
<tr>
<td>ART 412</td>
<td>Animation: Compositing and Motion Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ART 414</td>
<td>Animation: Production</td>
<td>3</td>
</tr>
<tr>
<td>ART 490</td>
<td>Animation: Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 211</td>
<td>Ceramics: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 221</td>
<td>Metals: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 231</td>
<td>Glass: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ACR 233</td>
<td>Glass: Introduction to Kiln Sculpting</td>
<td>3</td>
</tr>
<tr>
<td>AFA 221</td>
<td>Sculpture: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>6 credits from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFA 301</td>
<td>Drawing: Point of View</td>
<td>3</td>
</tr>
<tr>
<td>AFA 302</td>
<td>Drawing: Narrative and Metaphor</td>
<td>3</td>
</tr>
<tr>
<td>AFA 303</td>
<td>Drawing: Intermediate Figure</td>
<td>3</td>
</tr>
<tr>
<td>AFA 304</td>
<td>Drawing: Experimental Figure</td>
<td>3</td>
</tr>
<tr>
<td>AFA 312</td>
<td>Painting: The Figure</td>
<td>3</td>
</tr>
<tr>
<td>AFA 314</td>
<td>Painting: Materials and Strategies</td>
<td>3</td>
</tr>
<tr>
<td>AFA 315</td>
<td>Painting: Narrative</td>
<td>3</td>
</tr>
<tr>
<td>9 credits from art studio electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACR 211</td>
<td>Ceramics: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 221</td>
<td>Metals: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 231</td>
<td>Glass: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 312</td>
<td>Ceramics: Throwing 1</td>
<td>3</td>
</tr>
<tr>
<td>ACR 313</td>
<td>Ceramics: Hand Building 1</td>
<td>3</td>
</tr>
<tr>
<td>ACR 314</td>
<td>Ceramics: Throwing 2</td>
<td>3</td>
</tr>
<tr>
<td>ACR 315</td>
<td>Ceramics: Hand Building 2</td>
<td>3</td>
</tr>
<tr>
<td>ACR 316</td>
<td>Ceramics: Glaze and Kiln Technology</td>
<td>3</td>
</tr>
<tr>
<td>ACR 416</td>
<td>Ceramics: Throwing 3</td>
<td>3</td>
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<tr>
<td>ACR 417</td>
<td>Ceramics: Hand Building 3</td>
<td>3</td>
</tr>
<tr>
<td>ACR 418</td>
<td>Ceramics: Senior Project</td>
<td>3</td>
</tr>
<tr>
<td>ACR 437</td>
<td>Professional Practices for the 3D Artist</td>
<td>3</td>
</tr>
<tr>
<td>AFA 221</td>
<td>Sculpture: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ART 200</td>
<td>Introduction to Computer Art</td>
<td>3</td>
</tr>
<tr>
<td>Select one course from the following areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFA 202</td>
<td>Drawing: The Figure</td>
<td>3</td>
</tr>
<tr>
<td>AFA 211</td>
<td>Painting: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>AFA 231</td>
<td>Printmaking: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ART 231</td>
<td>Photography: Black and White Darkroom</td>
<td>3</td>
</tr>
<tr>
<td>ART 234</td>
<td>Intermedia: Experimental Video</td>
<td>3</td>
</tr>
<tr>
<td>ART 301</td>
<td>Digital Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>Select two courses from two different areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACR 224</td>
<td>Metals: Introduction to Enameling</td>
<td>3</td>
</tr>
<tr>
<td>ACR 233</td>
<td>Glass: Introduction to Kiln Sculpting</td>
<td>3</td>
</tr>
<tr>
<td>ACR 322</td>
<td>Metals: Metalsmithing and Die Forming</td>
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<td>ACR 323</td>
<td>Metals: Casting</td>
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<tr>
<td>ACR 325</td>
<td>Metals: Fabrication Techniques</td>
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<tr>
<td>ACR 331</td>
<td>Glass: Special Topics</td>
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<tr>
<td>ACR 332</td>
<td>Glass: Blowing</td>
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<tr>
<td>AFA 322</td>
<td>Sculpture: Additive and Subtractive Processes</td>
<td>3</td>
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<tr>
<td>AFA 323</td>
<td>Sculpture: Introduction to Casting</td>
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<tr>
<td>AFA 324</td>
<td>Sculpture: Wood</td>
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<tr>
<td>9 credits from art studio electives</td>
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<tr>
<td>ACR 211</td>
<td>Ceramics: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 221</td>
<td>Metals: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 231</td>
<td>Glass: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 233</td>
<td>Glass: Introduction to Kiln Sculpting</td>
<td>3</td>
</tr>
<tr>
<td>ACR 312</td>
<td>Ceramics: Throwing 1</td>
<td>3</td>
</tr>
<tr>
<td>ACR 314</td>
<td>Ceramics: Throwing 2</td>
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<tr>
<td>ACR 316</td>
<td>Ceramics: Glaze and Kiln Technology</td>
<td>3</td>
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<tr>
<td>ACR 416</td>
<td>Ceramics: Throwing 3</td>
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<tr>
<td>ART 200</td>
<td>Introduction to Computer Art</td>
<td>3</td>
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<tr>
<td>9 credits from</td>
<td></td>
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<tr>
<td>AFA 301</td>
<td>Drawing: Point of View</td>
<td>3</td>
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<tr>
<td>AFA 302</td>
<td>Drawing: Narrative and Metaphor</td>
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<tr>
<td>AFA 303</td>
<td>Drawing: Intermediate Figure</td>
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<tr>
<td>AFA 304</td>
<td>Drawing: Experimental Figure</td>
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<td>AFA 312</td>
<td>Painting: The Figure</td>
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<tr>
<td>AFA 313</td>
<td>Painting: Concepts and Contexts</td>
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<td>AFA 314</td>
<td>Painting: Materials and Strategies</td>
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<tr>
<td>AFA 315</td>
<td>Painting: Narrative</td>
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<tr>
<td>3 credits from</td>
<td></td>
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<tr>
<td>ACR 211</td>
<td>Ceramics: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 221</td>
<td>Metals: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 231</td>
<td>Glass: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 233</td>
<td>Glass: Introduction to Kiln Sculpting</td>
<td>3</td>
</tr>
<tr>
<td>3 credits from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 231</td>
<td>Photography: Black and White Darkroom</td>
<td>3</td>
</tr>
<tr>
<td>ART 234</td>
<td>Intermedia: Experimental Video</td>
<td>3</td>
</tr>
</tbody>
</table>
3 credits from AFA 341 Printmaking: Intaglio 1 3
AFA 351 Printmaking: Lithography 1 3
12 credits from art studio electives

Subtotal: 85

Glass, 60 credits

ACR 211 Ceramics: Introduction 3
ACR 221 Metals: Introduction 3
ACR 231 Glass: Introduction 3
ACR 233 Glass: Introduction to Kiln Sculpting 3
ACR 331 Glass: Special Topics 3
ACR 332 Glass: Blowing 3
ACR 333 Glass: Casting 3
ACR 334 Glass: Cold Working 3
ACR 335 Glass: Advanced Studio 3
ACR 436 Glass: Advanced Problems 3
ACR 438 Glass: Senior Project 3
AFA 221 Sculpture: Introduction 3
ART 200 Introduction to Computer Art 3

3 credits from ACR 369 Craft Internship 1 TO 3
ACR 437 Professional Practices for the 3D Artist 3

Select two courses from the following areas
AFA 202 Drawing: The Figure 3
AFA 211 Painting: Introduction 3
AFA 231 Printmaking: Introduction 3
ART 231 Photography: Black and White Darkroom 3
ART 234 Intermedia: Experimental Video 3
ART 301 Digital Fabrication 3

Select two courses from two different areas
ACR 224 Metals: Introduction to Enameling 3
ACR 312 Ceramics: Throwing 1 3
ACR 313 Ceramics: Hand Building 1 3
ACR 322 Metals: Metalsmithing and Die Forming 3
ACR 323 Metals: Casting 3
ACR 325 Metals: Fabrication Techniques 3
AFA 322 Sculpture: Additive and Subtractive Processes 3

AFA 323 Sculpture: Introduction to Casting 3
AFA 324 Sculpture: Wood 3

6 credits from art studio electives

Subtotal: 85

Metals, 60 credits

ACR 211 Ceramics: Introduction 3
ACR 221 Metals: Introduction 3
ACR 224 Metals: Introduction to Enameling 3
ACR 231 Glass: Introduction 3
ACR 322 Metals: Metalsmithing and Die Forming 3
ACR 323 Metals: Casting 3
ACR 325 Metals: Fabrication Techniques 3
ACR 426 Metals: New Technologies 3
ACR 427 Metals: Advanced Studio Problems 3
ACR 428 Metals: Senior Project 3
ACR 437 Professional Practices for the 3D Artist 3
AFA 221 Sculpture: Introduction 3
ART 200 Introduction to Computer Art 3
ART 301 Digital Fabrication 3

Select one course from the following areas
AFA 202 Drawing: The Figure 3
AFA 211 Painting: Introduction 3
AFA 231 Printmaking: Introduction 3
ART 231 Photography: Black and White Darkroom 3
ART 234 Intermedia: Experimental Video 3

Select two courses from two different areas
ACR 233 Glass: Introduction to Kiln Sculpting 3
ACR 312 Ceramics: Throwing 1 3
ACR 313 Ceramics: Hand Building 1 3
ACR 331 Glass: Special Topics 3
ACR 332 Glass: Blowing 3
AFA 322 Sculpture: Additive and Subtractive Processes 3
AFA 323 Sculpture: Introduction to Casting 3
AFA 324 Sculpture: Wood 3

9 credits from art studio electives

Subtotal: 85
Painting, 54 credits
AFA 202 Drawing: The Figure 3
AFA 211 Painting: Introduction 3
AFA 217 Painting: Watercolor 3
AFA 221 Sculpture: Introduction 3
AFA 231 Printmaking: Introduction 3
AFA 313 Painting: Concepts and Contexts 3
AFA 314 Painting: Materials and Strategies 3
AFA 416 Painting: Advanced Studio Practice 3
AFA 417 Painting: Independent Directions 3
AFA 489 Painting: Senior Project 3
ART 200 Introduction to Computer Art 3
3 credits from
AFA 312 Painting: The Figure 3
AFA 315 Painting: Narrative 3
3 credits from
AFA 316 Painting: Special Topics 3
AFA 317 Painting: Encaustics 3
3 credits from
AFA 301 Drawing: Point of View 3
AFA 302 Drawing: Narrative and Metaphor 3
AFA 303 Drawing: Intermediate Figure 3
AFA 304 Drawing: Experimental Figure 3
3 credits from
AFA 341 Printmaking: Intaglio 1 3
AFA 351 Printmaking: Lithography 1 3
AFA 361 Printmaking: Relief 1 3
AFA 371 Printmaking: Serigraphy 1 3
3 credits from
ACR 211 Ceramics: Introduction 3
ACR 221 Metals: Introduction 3
ACR 231 Glass: Introduction 3
ACR 233 Glass: Introduction to Kiln Sculpting 3
3 credits from
ART 231 Photography: Black and White Darkroom 3
ART 234 Intermedia: Experimental Video 3
9 credits from art studio electives

Photography and intermedia arts, 60 credits
ART 200 Introduction to Computer Art 3
ART 231 Photography: Black and White Darkroom 3
ART 232 Photography: Darkroom to Digital 3
ART 233 Photography: Fine Art Digital Imaging 3
ART 234 Intermedia: Experimental Video 3
ART 322 Intermedia: Space and Time 3
ART 330 Photography: Color 3
ART 332 Photography: Special Topics 3
ART 480 Senior Project in Photography and Intermedia Art 3
AFA 202 Drawing: The Figure 3
AFA 211 Painting: Introduction 3
AFA 221 Sculpture: Introduction 3
AFA 231 Printmaking: Introduction 3
9 credits from art studio electives
Complete one concentration, 12 credits
Concentration 1: Photography
ART 323 Intermedia: Special Topics 3
or
ART 333 Photography: Fine Art Digital Imaging 2 3
ART 331 Photography: Lighting Equipment and Techniques 3
ART 433 Photography: Directions 3
ART 434 Photography: Advanced Directions 3
Concentration 2: Intermedia arts
AFA 322 Sculpture: Additive and Subtractive Processes 3
ART 333 Photography: Fine Art Digital Imaging 2 3
or
Studio elective 3 3
ART 323 Intermedia: Special Topics 3
ART 424 Intermedia: Advanced Problems 3
Subtotal: 85

Printmaking, 60 credits
AFA 202 Drawing: The Figure 3
AFA 211 Painting: Introduction 3
AFA 217 Painting: Watercolor 3
AFA 221 Sculpture: Introduction 3
AFA 231 Printmaking: Introduction 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AFA 341</td>
<td>Printmaking: Intaglio 1</td>
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<tr>
<td>AFA 342</td>
<td>Printmaking: Intaglio 2</td>
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<tr>
<td>AFA 351</td>
<td>Printmaking: Lithography 1</td>
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</tr>
<tr>
<td>AFA 352</td>
<td>Printmaking: Lithography 2</td>
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<tr>
<td>AFA 361</td>
<td>Printmaking: Relief 1</td>
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<tr>
<td>AFA 371</td>
<td>Printmaking: Serigraphy 1</td>
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<td>AFA 453</td>
<td>Printmaking: Lithography 3</td>
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<td>AFA 493</td>
<td>Printmaking: Senior Project</td>
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<tr>
<td>ART 200</td>
<td>Introduction to Computer Art</td>
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<tr>
<td></td>
<td><strong>Total: 85 credits</strong></td>
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<td>AFA 301</td>
<td>Drawing: Point of View</td>
<td>3</td>
</tr>
<tr>
<td>AFA 302</td>
<td>Drawing: Narrative and Metaphor</td>
<td>3</td>
</tr>
<tr>
<td>AFA 303</td>
<td>Drawing: Intermediate Figure</td>
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</tr>
<tr>
<td>AFA 304</td>
<td>Drawing: Experimental Figure</td>
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<td><strong>Total: 3 credits</strong></td>
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<tr>
<td>ACR 211</td>
<td>Ceramics: Introduction</td>
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<tr>
<td>ACR 221</td>
<td>Metals: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 231</td>
<td>Glass: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 233</td>
<td>Glass: Introduction to Kiln Sculpting</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Total: 9 credits from art studio electives</strong></td>
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Sculpture, 54 credits

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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACR 211</td>
<td>Ceramics: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 221</td>
<td>Metals: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 231</td>
<td>Glass: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ACR 437</td>
<td>Professional Practices for the 3D Artist</td>
<td>3</td>
</tr>
<tr>
<td>AFA 221</td>
<td>Sculpture: Introduction</td>
<td>3</td>
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<tr>
<td>AFA 322</td>
<td>Sculpture: Additive and Subtractive Processes</td>
<td>3</td>
</tr>
<tr>
<td>AFA 323</td>
<td>Sculpture: Introduction to Casting</td>
<td>3</td>
</tr>
<tr>
<td>AFA 324</td>
<td>Sculpture: Wood</td>
<td>3</td>
</tr>
<tr>
<td>AFA 325</td>
<td>Sculpture: Casting and Mold Making</td>
<td>3</td>
</tr>
<tr>
<td>AFA 426</td>
<td>Sculpture: Advanced Problems</td>
<td>3</td>
</tr>
<tr>
<td>AFA 491</td>
<td>Sculpture: Senior Project</td>
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<tr>
<td>ART 200</td>
<td>Introduction to Computer Art</td>
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Visual Communication, 60 credits

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<tr>
<td>ADS 200</td>
<td>Design: Computer for Visual Communication/Graphic Design</td>
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<tr>
<td>ADS 241</td>
<td>Design: Introduction to Typography and Tools</td>
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<tr>
<td>ADS 242</td>
<td>Design: Introduction to Design Systems and Practices</td>
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<tr>
<td>ADS 301</td>
<td>Web Design: Coding for Designers</td>
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<tr>
<td>ADS 341</td>
<td>Design: Advanced Practices 1</td>
<td>3</td>
</tr>
<tr>
<td>ADS 342</td>
<td>Design: Advanced Practices 2</td>
<td>3</td>
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<tr>
<td>ADS 441</td>
<td>Design: Research and Professional Practices</td>
<td>3</td>
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<tr>
<td>ADS 442</td>
<td>Design: Senior Project and Portfolio</td>
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<tr>
<td>ADS 443</td>
<td>Design: Special Topics</td>
<td>3 TO 9</td>
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<tr>
<td>AFA 231</td>
<td>Printmaking: Introduction</td>
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<tr>
<td>AHS 310</td>
<td>History of Visual Communication</td>
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</tr>
<tr>
<td>ART 231</td>
<td>Photography: Black and White Darkroom</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ADS 302</td>
<td>Web Design: Frameworks, Libraries and Interactivity</td>
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</tr>
<tr>
<td>ART 233</td>
<td>Photography: Fine Art Digital Imaging</td>
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<td><strong>Total: 60 credits</strong></td>
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</table>
ART 234  Intermedia: Experimental Video  3
ART 301  Digital Fabrication  3
3 credits from
ADS 471  Design: Practicum  3
ADS 480  Design: Senior Thesis  3
ART 369  School of Art Internship  3
3 credits from
AFA 341  Printmaking: Intaglio 1  3
AFA 351  Printmaking: Lithography 1  3
AFA 361  Printmaking: Relief 1  3
AFA 371  Printmaking: Serigraphy 1  3
3 credits from
ACR 211  Ceramics: Introduction  3
ACR 221  Metals: Introduction  3
ACR 231  Glass: Introduction  3
ACR 233  Glass: Introduction to Kiln Sculpting  3
AFA 221  Sculpture: Introduction  3
9 credits from art studio electives

Subtotal: 85

MAJOR IN GRAPHIC ARTS MANAGEMENT (BA/BS)

81 CREDITS
Students preparing for management positions in the graphics industry will complete a departmental major in Graphic Arts Management. Students must select one of two minors: a minor in Business Administration for Graphic Arts Management or a minor in the School of Art. A required internship provides students experience in the graphic communications industry.

Required technical courses
GCM 180  Graphics: Intro to Printing Processes  3
GCM 181  Graphics: Impact Printing Processes  3
GCM 182  Graphics: Digital Imaging  3
GCM 183  Graphics: Screen and Specialty Graphics  3
GCM 281  Graphics: Ink and Substrate  3
GCM 283  Graphics: Packaging Technology  3
GCM 285  Graphics: Digital Prepress  3
GCM 286  Graphics: Fundamentals of Photography  3

GCM 373  Graphics: Packaging Construction and Design  3
GCM 381  Graphics: Color Management  3
GCM 385  Graphics: Cross Media Communications  3
GCM 386  Graphics: Planning and Finishing  3
GCM 387  Graphics: Applications of Commercial Photography  3

Required management courses
GCM 369  Graphics: Internship  3
GCM 484  Practicum in Graphic Communications  3
GCM 486  Graphics: Advanced Management Systems  3
GCM 488  Graphics: Cost Analysis  3
GCM 489  Graphics: Quality Control and Automation  3
GCM 490  Graphics: Capstone for Graphic Communications  3
Required Business Administration minor  18

CHEM 100  People and Chemistry  3
ECON 201  Elementary Microeconomics  3

Subtotal: 81

MAJOR IN VISUAL ARTS/ANIMATION (BA/BS/BFA)

85 CREDITS
Animation, 54 credits
ART 210  Animation: Introduction to 3D  3
ART 211  Traditional Animation  3
ART 310  Animation: Drawing for Animators  3
ART 311  Animation: 3D Modeling, Texturing, Lighting, and Rendering  3
ART 312  Animation: 3D Animation, Rigging, and Simulation  3
ART 313  Animation: Specialty  3
ART 315  Animation: Character Design  3
ART 316  Animation: Storyboarding  3
ART 411  Animation: Pre-Production  3
ART 414  Animation: Production  3
ART 490  Animation: Senior Project  3
3 credits from
ACR 211  Ceramics: Introduction  3
ACR 221  Metals: Introduction  3
ACR 231  Glass: Introduction  3
AFA 221  Sculpture: Introduction  3
6 credits from
AFA 303  Drawing: Intermediate Figure  3
AFA 304  Drawing: Experimental Figure  3
AFA 312  Painting: The Figure  3
AFA 315  Painting: Narrative  3
12 credits from art studio electives

Subtotal: 85

MINOR IN ART HISTORY
18 CREDITS

Students selecting this minor must receive approval from the Department of Art.
Open to all majors. Art majors selecting this minor must take 12 additional credits in AHS beyond the requirements in the major.

6 credits from
AHS 100  Introduction to Art  3
AHS 101  Introduction to Art History: Global Traditions  3
AHS 102  Introduction to Art History: The Modern and Contemporary World  3

Subtotal: 6

(Students may substitute any ACR, ADS, AFA, ART, or GCM studio art course, but only 3 credits may count in this category).

9 credits from
Any AHS course 200, 300, or 400 level

Subtotal: 9

3 credits from
AHS 450  Art Museum Theory and Practice  3
AHS 455  Seminar in Art History  3

Subtotal: 3

MINOR IN BUSINESS ADMINISTRATION FOR GRAPHIC ARTS MANAGEMENT
18 CREDITS

Required Courses
MGT 300  Managing Behavior in Organizations  3
MGT 361  Foundations of Human Resource Management and Employee Relations  3

MINOR IN DIGITAL PUBLISHING
18 CREDITS

Required Courses
GCM 180  Graphics: Intro to Printing Processes  3
GCM 182  Graphics: Digital Imaging  3
GCM 184  Graphics: Computer Applications  3
GCM 285  Graphics: Digital Prepress  3
GCM 381  Graphics: Color Management  3
GCM 385  Graphics: Cross Media Communications  3

Subtotal: 18

MINOR IN PRINT PRODUCTION
18 CREDITS

Required Courses
GCM 180  Graphics: Intro to Printing Processes  3
GCM 181  Graphics: Impact Printing  3
Teacher Education

Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for the descriptions of these courses and other professional requirements of the teacher education program.

TEACHING MAJOR IN ART EDUCATION (BA/BS)

94 CREDITS

Required Courses

<table>
<thead>
<tr>
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<tr>
<td>ADS 101</td>
<td>2D Foundations Studio</td>
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<td>ADS 102</td>
<td>3D Foundations Studio</td>
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</tr>
<tr>
<td>ADS 103</td>
<td>4D Foundations Studio</td>
<td>3</td>
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<tr>
<td>AED 201</td>
<td>Art Education: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>AED 304</td>
<td>Art Education: Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>AED 305</td>
<td>Art Education: Elementary Teaching Practicum</td>
<td>3</td>
</tr>
<tr>
<td>AED 399</td>
<td>Art Education: Secondary Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>AFA 101</td>
<td>Drawing Studio</td>
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<tr>
<td>AHS 101</td>
<td>Introduction to Art History: Global Traditions</td>
<td>3</td>
</tr>
<tr>
<td>AHS 102</td>
<td>Introduction to Art History: The Modern and Contemporary World</td>
<td>3</td>
</tr>
<tr>
<td>AHS 201</td>
<td>Art Criticism and Meaning</td>
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<tr>
<td>ART 100</td>
<td>Art Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ART 200</td>
<td>Introduction to Computer Art</td>
<td>3</td>
</tr>
</tbody>
</table>

3 credits from 200-, 300-, or 400-level AHS courses

Subtotal: 3

6 credits from studio area specialty:
Two courses (plus one from above) in a single studio area (ceramics, drawing, metals, painting, photography and intermedia arts, printmaking, sculpture, and glass)

Subtotal: 12

Subtotal: 58

ALL-GRADE EDUCATION PROGRAM

Professional education sequence, 36 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDAL 470</td>
<td>Student Teaching: All-Grade</td>
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<tr>
<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
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<tr>
<td>EDJH 385</td>
<td>Principles of Teaching in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
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<tr>
<td>EDPS 250</td>
<td>Human Growth and Development</td>
<td>3</td>
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<tr>
<td>EDPS 390</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>EDSE 150</td>
<td>Basic Concepts of Secondary Education</td>
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</tr>
<tr>
<td>EDSE 320</td>
<td>Reading for Diverse Learners in Secondary Content Classes</td>
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<tr>
<td>EDSE 380</td>
<td>Principles of Teaching in the Secondary School</td>
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<td>EDSE 465</td>
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Subtotal: 36

Subtotal: 94

See Professional Education Assessment/Decision Points (p. 234), for additional information.

SCHOOL OF MUSIC

R. Hourigan, Director
bsu.edu/music

The School of Music offers programs in ensembles and conducting, music education, music history and
musicology, music theory and composition, music media production, and music performance. It is accredited by the National Association of Schools of Music. The school offers four-year undergraduate majors in music performance, music education, music media production, and music composition. Admission to major or minor study in music is based on an audition in applied music. Undergraduate music majors are required to demonstrate proficiency in one or more of the following: keyboard, symphonic instruments (strings, woodwinds, brass, percussion), guitar, voice, or harp.

Students majoring or minoring in music are expected to attend a weekly recital hour, other recitals, and to perform regularly on their primary instrument. All undergraduate music students must be in compliance with the mandated major/designated ensemble policy as required by curricula. Transfer credit for any music course must be cleared by the Coordinator of Undergraduate Programs in Music. Students are encouraged to consult the School of Music Undergraduate Handbook, located on the Current Student link of the School of Music website (http://cms.bsu.edu/academics/collegesanddepartments/music/currentstudents), Section I B.5, for detailed policies on transferring credits into a School of Music degree program. For more information, contact the School of Music, 765-285-5400.

### BACHELOR IN MUSIC EDUCATION (BME)

#### 102-123 CREDITS

**Instrumental and General Music Licensing concentration**

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<th>Credits</th>
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<td>MUHI 330</td>
<td>Music History</td>
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</tr>
<tr>
<td>MUHI 331</td>
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<tr>
<td>MUSC 499</td>
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</tr>
<tr>
<td>MUSE 250</td>
<td>Brass Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSE 252</td>
<td>Woodwind Techniques 1</td>
<td>2</td>
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<tr>
<td>MUSE 253</td>
<td>Woodwind Techniques 2</td>
<td>2</td>
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<tr>
<td>MUSE 254</td>
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<tr>
<td>MUSE 256</td>
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<tr>
<td>MUSP 290</td>
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**Subtotal: 60**

**Additional Requirements - Professional Education**

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<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
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<tr>
<td>EDPS 250</td>
<td>Human Growth and Development</td>
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<td>MUSE 150</td>
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<tr>
<td>MUSE 350</td>
<td>Contemporary Issues in Music Education: Practicum and Applications</td>
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<tr>
<td>MUSE 351</td>
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</table>
**Vocal and General Music Licensing concentration**

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<tr>
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<tr>
<td>MUHI 331</td>
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<td>MUSC 499</td>
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<tr>
<td>MUSE 258</td>
<td>Voice Techniques</td>
<td>2</td>
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<tr>
<td>MUSE 391</td>
<td>Choral Laboratory</td>
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<tr>
<td>MUSE 457</td>
<td>Specialized Approaches For Vocal/General Majors</td>
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<td>MUSP 290</td>
<td>Introduction to Conducting</td>
<td>2</td>
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<td>MUSP 391</td>
<td>Choral Conducting and Rehearsal Techniques</td>
<td>2</td>
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<td>MUSP 398</td>
<td>Diction for Singers</td>
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<tr>
<td>MUST 101</td>
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<td>MUST 102</td>
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<td>MUST 111</td>
<td>Music Theory</td>
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<tr>
<td>MUST 112</td>
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<td>MUSC 350</td>
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<td>MUSC 499</td>
<td>Recital</td>
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<tr>
<td>MUSE 250</td>
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<td>MUSE 256</td>
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<td>MUSE 258</td>
<td>Voice Techniques</td>
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<td>MUSE 390</td>
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<tr>
<td>MUSE 457</td>
<td>Specialized Approaches For Vocal/General Majors</td>
<td>3</td>
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</table>

**Subtotal: 102**

C or better grades are required in all MUSE courses to satisfy prerequisites. See Professional Education Assessment/Decision Points for additional information.

**Dual: Instrumental w/Vocal Add-on Licensing concentration**

Please note that dual licensing programs are designed as four and a half year programs of study and will require additional time to degree.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUHI 200</td>
<td>Survey of Music Literature</td>
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<tr>
<td>MUHI 330</td>
<td>Music History</td>
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<tr>
<td>MUHI 331</td>
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<td>MUSC 499</td>
<td>Recital</td>
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<tr>
<td>MUSE 250</td>
<td>Brass Techniques</td>
<td>2</td>
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<tr>
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<td>Woodwind Techniques 1</td>
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<td>MUSE 254</td>
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<tr>
<td>MUSE 256</td>
<td>String Techniques</td>
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<tr>
<td>MUSE 258</td>
<td>Voice Techniques</td>
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<td>MUSE 390</td>
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<td>MUSE 391</td>
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**Subtotal: 102**

C or better grades are required in all MUSE courses to satisfy prerequisites. See Professional Education Assessment/Decision Points for additional information.
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**Subtotal:** 102

C or better grades are required in all MUSE courses to satisfy prerequisites. See Professional Education Assessment/Decision Points for additional information.

**Dual: Vocal w/Instrumental Add-on Licensing concentration**

Please note that dual licensing programs are designed as four and a half year programs of study and will require additional time to degree.

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<thead>
<tr>
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MUST 112  Music Theory  2  
MUST 201  Sight Singing and Ear Training  1  
MUST 202  Sight Singing and Ear Training  1  
MUST 211  Music Theory  2  
MUST 212  Music Theory  2  
MUST 311  Music Theory: Form and Analysis  2  
MUST 410  Choral Arranging  2  
MUSP 201  Principal Study  1 TO 4  
MUSP 401  Principal Study  1 TO 4  
MUSC 340  Large Instrumental Ensemble .5 TO 3  
MUSC 341  Large Instrumental Ensemble .5 TO 3  
MUSC 350  Large Vocal Ensemble  1 TO 3  
MUSC 351  Large Vocal Ensemble .5 TO 3  
MUSP 325  Secondary Study (Piano)  1  
MUSP 326  Group Piano  1  
MUHI 200  Survey of Music Literature  2  
MUHI 330  Music History  3  
MUHI 331  Music History 2  3  
MUSC 499  Recital  1  
MUST 101  Sight Singing and Ear Training  1  
MUST 102  Sight Singing and Ear Training  1  
MUST 111  Music Theory  2  
MUST 112  Music Theory  2  
MUST 121  Introduction to Computer Music  3  
MUST 122  Acoustics for Musicians  3  
MUST 201  Sight Singing and Ear Training  1  
MUST 202  Sight Singing and Ear Training  1  
MUST 211  Music Theory  2  
MUST 212  Music Theory  2  
MUST 221  Music Composition 1  2  
MUST 222  Music Composition 2  2  
MUST 241  Computer Music 1  3  
MUST 311  Music Theory: Form and Analysis  2  
MUST 312  Music Theory: Eighteenth-Century Counterpoint  2  
MUST 321  Composition  2  
MUST 350  Computer Composition 1  2  
MUST 411  Instrumentation and Orchestration  2  
MUST 417  Theory of Twentieth-Century Music and Twenty-First-Century Music  3  
MUSE 100  Introduction to Music Education 1  2  
MUSE 150  Introduction to Music Education 2  2  
MUSE 350  Contemporary Issues in Music Education: Practicum and Applications  2  
MUSE 351  Elementary General Music Methods  3  
MUSE 353  Secondary General Music Methods  3  
MUSE 355  Instrumental Music Methods (String)  3  
MUSE 375  Instrumental Music Methods (Band)  3  
MUSE 470  Student Teaching in Music  7  

Subtotal: 102

C or better grades are required in all MUSE courses to satisfy prerequisites. See Professional Education Assessment/Decision Points for additional information.

Subtotal: 102-123

MAJOR IN MUSIC COMPOSITION (BM)  
92 CREDITS

Required Courses

MUHI 200  Survey of Music Literature  2  
MUHI 330  Music History  3  
MUHI 331  Music History 2  3  
MUSC 499  Recital  1  
MUST 101  Sight Singing and Ear Training  1  
MUST 102  Sight Singing and Ear Training  1  
MUST 111  Music Theory  2  
MUST 112  Music Theory  2  
MUST 121  Introduction to Computer Music  3  
MUST 122  Acoustics for Musicians  3  
MUST 201  Sight Singing and Ear Training  1  
MUST 202  Sight Singing and Ear Training  1  
MUST 211  Music Theory  2  
MUST 212  Music Theory  2  
MUST 221  Music Composition 1  2  
MUST 222  Music Composition 2  2  
MUST 241  Computer Music 1  3  
MUST 311  Music Theory: Form and Analysis  2  
MUST 312  Music Theory: Eighteenth-Century Counterpoint  2  
MUST 321  Composition  2  
MUST 350  Computer Composition 1  2  
MUST 411  Instrumentation and Orchestration  2  
MUST 417  Theory of Twentieth-Century Music and Twenty-First-Century Music  3  
MUST 495  Composition-Project Recital  1 TO 3
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<td>Human-Computer Interface Design</td>
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<td>MUST 445</td>
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<td>Computer Music Composition 2</td>
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<td>MUST 491</td>
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**Concentration 2: Sonic arts technology**

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<td>MUST 410</td>
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**Subtotal:**

- **Subtotal:** 92
# MAJOR IN MUSIC MEDIA PRODUCTION (BS)

## 73 CREDITS

### Required Courses

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Subtotal: 7

### Subtotal: 73

# MAJOR IN MUSIC PERFORMANCE (BM)

## 90-94 CREDITS

### Guitar concentration, 90 credits

### Required Courses

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Complete one concentration:

Guitar: Classical studies concentration

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**Subtotal: 2-6**

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**Subtotal: 3-4**

**Electives**
- **MUHI Choose from**
  - MUHI 435 - Music in the Baroque Era                              | 2       |
  - MUHI 436 - Music in the Classical Era                             | 2       |
  - MUHI 437 - Music in the Romantic Era                              | 2       |
  - MUHI 438 - Opera History from 1780 to 1980                        | 2       |
  - MUHI 491 - Independent Study in Music History                     | 1 TO 3  |
  - MUHI 492 - Special Topics in Musicology                           | 1 TO 3  |

**Subtotal: 4**

MU fulfill 4-10 credits from electives in music
MUSP 202, if elected, is to be Lute.

**Subtotal: 4-10**

Guitar: Jazz studies concentration
- ENT 241 - The Entrepreneurial Experience                          | 3       |
- MUHI 441 - Jazz History                                           | 2       |
- MUSC 340 - Large Instrument Ensemble                              | .5 TO 3 |
  - or
  - MUSC 341 - Large Instrument Ensemble                              | .5 TO 3 |
- MUSE 465 - Jazz Pedagogy                                           | 2       |
- MUSP 200 - Major Study                                             | 1 TO 4  |
  - or
  - MUSP 400 - Major Study                                             | 1 TO 4  |
- MUSP 203 - Minor Study                                             | 1 TO 4  |
- MUSP 231 - Jazz Combo                                             | 1 TO 4  |
- MUSP 439 - Small Ensemble (Guitar)                                 | 1 TO 2  |
- MUSP 456 - Jazz Improvisation 1                                    | 2       |
- MUSP 457 - Jazz Improvisation 2                                    | 2       |
- MUSP 462 - Jazz Piano Lab                                          | 1       |
- MUSP 499 - Independent Study in Musical Performance                | 1 TO 4  |
- MUST 223 - Jazz Composition                                        | 2       |
- MUST 250 - Jazz Theory                                             | 2       |
- MUST 414 - Jazz Arranging                                          | 2       |
- MUST 415 - Jazz Arranging 2                                        | 2       |

Piano concentration, 90 credits

**Required Courses**
- MUHI 200 - Survey of Music Literature                              | 2       |
- MUHI 330 - Music History                                           | 3       |
- MUHI 331 - Music History 2                                         | 3       |
- MUSC 499 - Recital                                                 | 1       |
- MUSP 290 - Introduction to Conducting                              | 2       |
- MUSP 397 - Junior Recital                                          | 1       |
- MUSP 498 - Senior Recital                                          | 2       |
- MUST 101 - Sight Singing and Ear Training                          | 1       |
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<td>MUSP 204</td>
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<td>MUSP 231</td>
<td>Jazz Combo</td>
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<td>MUSP 456</td>
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<td>MUSP 462</td>
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<td>MUSP 499</td>
<td>Independent Study in Musical Performance</td>
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<td>MUST 414</td>
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**Complete one concentration**

**Piano: Classical studies concentration**

**Subtotal: 3-5**

**7-8 credits from**

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**Subtotal: 7-8**

**2-4 credits from**

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<td>MUSC 341</td>
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<td>MUSC 350</td>
<td>Large Vocal Ensemble</td>
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<td>MUSC 351</td>
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**Subtotal: 2-4**

**Electives**

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**Piano: Jazz studies concentration**

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<td>MUSE 465</td>
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<td>MUSP 204</td>
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<td>MUSP 231</td>
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<td>MUSP 456</td>
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<td>MUSP 462</td>
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<td>MUSP 499</td>
<td>Independent Study in Musical Performance</td>
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<td>MUST 414</td>
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**Subtotal: 0-2**
2 credits from
- **MUSC 340** Large Instrumental Ensemble  .5 TO 3
- **MUSC 341** Large Instrumental Ensemble  .5 TO 3
- **MUSC 350** Large Vocal Ensemble  1 TO 3
- **MUSC 351** Large Vocal Ensemble  .5 TO 3

**Subtotal: 2**

6 credits from
- **MUSC 340** Large Instrumental Ensemble  .5 TO 3
- **MUSC 341** Large Instrumental Ensemble  .5 TO 3

**Subtotal: 6**

Organ concentration, 91 credits
23 credits from
- **MUSP 200** Major Study  1 TO 4
- **MUHI 200** Survey of Music Literature  2
- **MUHI 330** Music History  3
- **MUHI 331** Music History 2  3
- **MUHI 496** History of Organ Literature and Design  2
- **MUHI 498** Choral Music and Hymnody of the Church  3
- **MUSE 458** Methods of Organ Teaching  1
- **MUSP 202** Secondary Study  1 TO 4
- **MUSP 377** Service Playing and Church Music Administration  2
- **MUSP 391** Choral Conducting and Rehearsal Techniques  2
- **MUSP 397** Junior Recital  1
- **MUSP 425** Elementary Piano Pedagogy and Literature  3
- **MUSP 437** Small Ensemble (Organ and Church Music)  1 TO 2
- **MUSP 477** Continuo Playing and Keyboard Improvisation  1 TO 2
- **MUSP 498** Senior Recital  2
- **MUST 101** Sight Singing and Ear Training  1
- **MUST 102** Sight Singing and Ear Training  1

- **MUST 111** Music Theory  2
- **MUST 112** Music Theory  2
- **MUST 201** Sight Singing and Ear Training  1
- **MUST 202** Sight Singing and Ear Training  1
- **MUST 211** Music Theory  2
- **MUST 212** Music Theory  2
- **MUST 311** Music Theory: Form and Analysis  2
- **MUST 312** Music Theory: Eighteenth-Century Counterpoint  2

1-3 credits from
- **MUSP 325** Secondary Study (Piano)  1

**Subtotal: 1-3**

2-5 credits from
- **MUSP 327** Secondary Study (Organ/Harpsichord)  1

**Subtotal: 2-5**

3 credits from
- **MUSC 350** Large Vocal Ensemble  1 TO 3
- **MUSC 351** Large Vocal Ensemble  .5 TO 3

**Subtotal: 3**

1 credit from ensemble electives

**Subtotal: 1**

1-3 credits from
- **MUSC** and **MUSP** electives

**Subtotal: 1-3**

2-4 credits from
- **MUST 221** Music Composition 1  2
- **MUST 341** Creative Practices in Sonic Arts Technology  2
- **MUST 412** Compositional Practices of the Seventeenth and Eighteenth Centuries  2 TO 3
- **MUST 420** Sixteenth-Century Counterpoint  3

**Subtotal: 2-4**

3-8 credits from
- **MUHI 435** Music in the Baroque Era  2
- **MUHI 436** Music in the Classical Era  2
- **MUHI 437** Music in the Romantic Era  2
- **MUHI 488** History of Harpsichord Literature and Design  1
- **MUST 421** Analytical Technique  3
### Subtotal: 3-8

**Symphonic instruments concentration, 90 credits**

**Required Courses**

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<td>Introduction to Conducting</td>
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<td>MUSP 326</td>
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<td>Junior Recital</td>
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Complete one concentration

**Symphonic Instruments: Classical studies concentration**

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<tr>
<td>MUSP 200</td>
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<td>MUSP 400</td>
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2 credits from

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3-4 credits from

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<td>MUSP 432</td>
<td>Small Ensemble (Percussion)</td>
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<td>MUSP 433</td>
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<td>MUSP 434</td>
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### Subtotal: 3-4

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### Subtotal: 2

2-4 credits from

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<td>MUST 412</td>
<td>Compositional Practices of the Seventeenth and Eighteenth Centuries</td>
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<td>MUST 414</td>
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<td>MUST 416</td>
<td>Theory of Nineteenth-Century Music</td>
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<td>Theory of Twentieth-Century Music</td>
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### Subtotal: 2-4

12 credits from

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<td>MUSC 341</td>
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### Subtotal: 12

String and harp primary students may count up to 4 additional registrations in MUSP 433/MUSP 434 toward satisfying the 12 credits of MUSC large ensembles.

**Electives**

MUHI Choose from

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MUHI 436  Music in the Classical Era  2  
MUHI 437  Music in the Romantic Era  2  
MUHI 438  Opera History from 1780 to 1980  2  
MUHI 491  Independent Study in Music History  1 TO 3  
MUHI 492  Special Topics in Musicology  1 TO 3  

Subtotal: 4

MU Fulfill 2-4 credits from electives in music

Subtotal: 2-4

Symphonic Instruments: Jazz studies concentration

ENT 241  The Entrepreneurial Experience  3  
MUHI 441  Jazz History  2  
MUSE 465  Jazz Pedagogy  2  

Subtotal: 4

MUSP 200  Major Study  1 TO 4  
MUSP 203  Minor Study  1 TO 4  
MUSP 231  Jazz Combo  1 TO 4  
MUSP 456  Jazz Improvisation 1  2  
MUSP 457  Jazz Improvisation 2  2  
MUSP 462  Jazz Piano Lab  1  
MUSP 499  Independent Study in Musical Performance  1 TO 4  
MUST 223  Jazz Composition  2  
MUST 250  Jazz Theory  2  
MUST 414  Jazz Arranging  2  
MUST 415  Jazz Arranging 2  2  

2 credits from
MUSC 340  Large Instrumental Ensemble .5  TO 3  
MUSC 341  Large Instrumental Ensemble .5  TO 3  

Subtotal: 2

2 credits of MUSC must be in traditional ensemble on primary instrument

6 credits from
MUSC 340  Large Instrumental Ensemble .5  TO 3  
MUSC 341  Large Instrumental Ensemble .5  TO 3  

Subtotal: 6

0-1 credits from
MUSP 430  Small Ensemble (Woodwinds)  1 TO 4  
MUSP 431  Small Ensemble (Brass)  1 TO 4  
MUSP 432  Small Ensemble (Percussion)  1 TO 4  
MUSP 433  Small Ensemble (Strings)  1 TO 4  
MUSP 434  Small Ensemble (Harp)  1 TO 4  

Subtotal: 0-1

Voice concentration, 94 credits

25 credits from
MUSP 200  Major Study  1 TO 4  
FR 101  Beginning French 1  4  
FR 102  Beginning French 2  4  
GER 101  Beginning German 1  4  
GER 102  Beginning German 2  4  
MUHI 200  Survey of Music Literature  2  
MUHI 330  Music History  3  
MUHI 331  Music History 2  3  
MUSC 499  Recital  1  
MUSP 290  Introduction to Conducting  2  
MUSP 348  Opera Workshop  1  
MUSP 397  Junior Recital  1  
MUSP 398  Diction for Singers  2  
MUSP 429  Vocal Pedagogy  2  
MUSP 440  Vocal Diction and Literature  2  
MUSP 498  Senior Recital  2  
MUST 101  Sight Singing and Ear Training  1  
MUST 102  Sight Singing and Ear Training  1  
MUST 111  Music Theory  2  
MUST 112  Music Theory  2  

Subtotal: 94
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2-6 credits from

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Subtotal: 2-6

7 credits from

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<td>MUSC 350</td>
<td>Large Vocal Ensemble</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>MUSC 351</td>
<td>Large Vocal Ensemble</td>
<td>.5 TO 3</td>
</tr>
<tr>
<td>MUSP 438</td>
<td>Small Ensemble (Vocal)</td>
<td>1 TO 2</td>
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Subtotal: 7

6-10 credits from

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<th>Course Title</th>
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<tr>
<td>DANC 110</td>
<td>Introduction to Ballet 1</td>
<td>1</td>
</tr>
<tr>
<td>DANC 111</td>
<td>Introduction to Ballet 2</td>
<td>1</td>
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<tr>
<td>DANC 120</td>
<td>Introduction to Modern 1</td>
<td>1</td>
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<td>DANC 121</td>
<td>Introduction to Modern 2</td>
<td>1</td>
</tr>
<tr>
<td>DANC 130</td>
<td>Introduction to Jazz 1</td>
<td>1</td>
</tr>
<tr>
<td>DANC 131</td>
<td>Introduction to Jazz 2</td>
<td>1</td>
</tr>
<tr>
<td>DANC 232</td>
<td>Tap 1</td>
<td>1</td>
</tr>
<tr>
<td>MUHI 438</td>
<td>Opera History from 1780 to 1980</td>
<td>2</td>
</tr>
<tr>
<td>MUSP 348</td>
<td>Opera Workshop</td>
<td>1</td>
</tr>
<tr>
<td>MUST 410</td>
<td>Choral Arranging</td>
<td>2</td>
</tr>
<tr>
<td>THEA 232</td>
<td>Acting 1</td>
<td>3</td>
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Subtotal: 6-10

Total Credit Hours: 90-94

MINOR IN MUSIC: HISTORY

24 CREDITS

4-6 credits from

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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUHI 435</td>
<td>Music in the Baroque Era</td>
<td>2</td>
</tr>
<tr>
<td>MUHI 436</td>
<td>Music in the Classical Era</td>
<td>2</td>
</tr>
<tr>
<td>MUHI 437</td>
<td>Music in the Romantic Era</td>
<td>2</td>
</tr>
<tr>
<td>MUHI 438</td>
<td>Opera History from 1780 to 1980</td>
<td>2</td>
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Subtotal: 4-6

4-8 credits from

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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUHI 105</td>
<td>Music and Popular Culture in America</td>
<td>3</td>
</tr>
<tr>
<td>MUHI 491</td>
<td>Independent Study in Music History and/or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>400-level courses</td>
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Subtotal: 4-8

4-6 credits from

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUST 311</td>
<td>Music Theory: Form and Analysis</td>
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</tr>
<tr>
<td>MUST 312</td>
<td>Music Theory: Eighteenth-Century Counterpoint</td>
<td>2</td>
</tr>
<tr>
<td>MUST 416</td>
<td>Theory of Nineteenth-Century Music</td>
<td>3</td>
</tr>
<tr>
<td>MUST 417</td>
<td>Theory of Twentieth-Century Music and Twenty-First-Century Music</td>
<td>3</td>
</tr>
<tr>
<td>MUST 420</td>
<td>Sixteenth-Century Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MUST 421</td>
<td>Analytical Technique</td>
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Subtotal: 4-6

3-4 credits from

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AHS 100</td>
<td>Introduction to Art</td>
<td>3</td>
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<tr>
<td>DANC 100</td>
<td>Introduction to Dance History</td>
<td>3</td>
</tr>
<tr>
<td>THEA 100</td>
<td>Introduction to Theatre</td>
<td>3</td>
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<tr>
<td></td>
<td>Any course in FR, GER, LAT, World History (Europe, Africa, Middle East, Asia)</td>
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Subtotal: 3-4

Music elective

Subtotal: 2-3

Subtotal: 24

Open only to majors in music.

MINOR IN MUSIC: JAZZ/COMMERCIAL

25 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUHI 200</td>
<td>Survey of Music Literature</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td>MUSP 204</td>
<td>Jazz Study</td>
<td>1 TO 2</td>
</tr>
<tr>
<td>MUSP 231</td>
<td>Jazz Combo</td>
<td>1 TO 4</td>
</tr>
<tr>
<td>MUSP 456</td>
<td>Jazz Improvisation 1</td>
<td>2</td>
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</table>
MUSP 457  Jazz Improvisation 2  2
MUSP 462  Jazz Piano Lab  1
MUST 101  Sight Singing and Ear Training  1
MUST 102  Sight Singing and Ear Training  1
MUST 111  Music Theory  2
MUST 112  Music Theory  2
MUST 250  Jazz Theory  2
2 credits from
MUSC 341  Large Instrumental Ensemble  .5 TO 3

Subtotal: 2

4 credits from
MUHI 441  Jazz History  2
MUSE 465  Jazz Pedagogy  2
MUSP 204  Jazz Study  1 TO 2
MUST 223  Jazz Composition  2
MUST 414  Jazz Arranging  2
MUST 415  Jazz Arranging 2  2

Subtotal: 4

Subtotal: 25

MINOR IN MUSIC: LITERATURE

24 CREDITS

Required Courses
MUHI 200  Survey of Music Literature  2
MUHI 331  Music History 2  3
MUSC 499  Recital  1
MUST 101  Sight Singing and Ear Training  1
MUST 102  Sight Singing and Ear Training  1
MUST 111  Music Theory  2
MUST 112  Music Theory  2
2-3 credits from
MUHI 401  Piano Literature  2
MUSP 425  Elementary Piano Pedagogy and Literature  3

Subtotal: 2-3

7-9 credits from
MUSP 203  Minor Study  1 TO 4

Subtotal: 7-9

0-2 credits from large and small ensemble (two piano, accompanying for small ensemble, or piano in chamber group acceptable)

Subtotal: 0-2

Subtotal: 24

MINOR IN MUSIC: SACRED

26 CREDITS

Required Courses
MUHI 200  Survey of Music Literature  2
MUSC 499  Recital  1
9 credits from
MUHI 330  Music History  3
MUHI 331  Music History 2  3

Subtotal: 3-4
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<tr>
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<td>MUST 101</td>
<td>Sight Singing and Ear Training</td>
<td>1</td>
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<tr>
<td>MUST 102</td>
<td>Sight Singing and Ear Training</td>
<td>1</td>
</tr>
<tr>
<td>MUST 111</td>
<td>Music Theory</td>
<td>2</td>
</tr>
<tr>
<td>MUST 112</td>
<td>Music Theory</td>
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**Subtotal:** 9

2-5 credits from
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>MUHI 498</td>
<td>Choral Music and Hymnody of the Church</td>
<td>3</td>
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<tr>
<td>MUSP 290</td>
<td>Introduction to Conducting</td>
<td>2</td>
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**Subtotal:** 2-5

0-1 credits from
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSP 437</td>
<td>Small Ensemble (Organ and Church Music)</td>
<td>1</td>
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<tr>
<td>MUSP 438</td>
<td>Small Ensemble (Vocal)</td>
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**Subtotal:** 0-1

1-3 credits from
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSC 350</td>
<td>Large Vocal Ensemble</td>
<td>1</td>
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<tr>
<td>MUSC 351</td>
<td>Large Vocal Ensemble</td>
<td>.5</td>
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**Subtotal:** 1-3

Complete one concentration

Concentration A: Organ, 8 credits
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUHI 496</td>
<td>History of Organ Literature and Design</td>
<td>2</td>
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<tr>
<td>MUSE 458</td>
<td>Methods of Organ Teaching</td>
<td>1</td>
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<tr>
<td>MUSP 203</td>
<td>Minor Study</td>
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<tr>
<td>MUSP 377</td>
<td>Service Playing and Church Music Administration</td>
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**Subtotal:** 8

Concentration B: Voice, 8 credits
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<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>MUSP 203</td>
<td>Minor Study</td>
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4-5 credits from
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUHI 330</td>
<td>Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUHI 331</td>
<td>Music History 2</td>
<td>3</td>
</tr>
<tr>
<td>MUHI 435</td>
<td>Music in the Baroque Era</td>
<td>2</td>
</tr>
<tr>
<td>MUHI 436</td>
<td>Music in the Classical Era</td>
<td>2</td>
</tr>
<tr>
<td>MUHI 437</td>
<td>Music in the Romantic Era</td>
<td>2</td>
</tr>
<tr>
<td>MUST 112</td>
<td>Music Theory</td>
<td>2</td>
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<tr>
<td>MUST 412</td>
<td>Compositional Practices of the Seventeenth and Eighteenth</td>
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**Subtotal:** 8

Subtotal: 26

**MINOR IN MUSIC: SYMPHONIC INSTRUMENTS OR GUITAR**

**24 CREDITS**

Required Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUHI 200</td>
<td>Survey of Music Literature</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td>MUSP 203</td>
<td>Minor Study</td>
<td>1</td>
</tr>
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</table>

Subtotal: 8

2 credits from
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSP 325</td>
<td>Secondary Study (Piano)</td>
<td>1</td>
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<tr>
<td>MUSP 326</td>
<td>Group Piano</td>
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**Subtotal:** 2

1 credit from
<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSP</td>
<td>(small ensembles)</td>
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**Subtotal:** 1

2 credits from 1
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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tr>
<td>MUSC 340</td>
<td>Large Instrumental Ensemble</td>
<td>.5</td>
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<tr>
<td>MUSC 341</td>
<td>Large Instrumental Ensemble</td>
<td>.5</td>
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</table>

**Subtotal:** 2

Guitar minors may satisfy the ensemble requirements by taking 3 credits of small ensemble (strings).

**MINOR IN MUSIC: THEORY**

**24 CREDITS**

Required Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUHI 200</td>
<td>Survey of Music Literature</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td>MUST 101</td>
<td>Sight Singing and Ear Training</td>
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</tr>
<tr>
<td>MUST 102</td>
<td>Sight Singing and Ear Training</td>
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**Subtotal:** 24
### Music Theory
- **MUST 111**: Music Theory, 2 credits
- **MUST 112**: Music Theory, 2 credits
- **MUST 201**: Sight Singing and Ear Training, 1 credit
- **MUST 202**: Sight Singing and Ear Training, 1 credit
- **MUST 211**: Music Theory, 2 credits
- **MUST 212**: Music Theory, 2 credits

2 credits from **MUSP 203**: Minor Study, 1 to 4 credits

**Subtotal: 2**

2 credits from **MUSP 325**: Secondary Study (Piano), 1 credit
- or
- **MUSP 326**: Group Piano, 1 credit

**Subtotal: 2**

2 credits from **MUSC 340**: Large Vocal Ensemble, 0.5 to 3 credits
- or
- **MUSP 327**: Secondary Study (Organ/Harpischord), 1 credit

**Subtotal: 2**

2 credits from **MUSC 350**: Large Vocal Ensemble, 1 to 3 credits

5-7 credits from Electives in Music

**Subtotal: 5-7**

**MINOR IN MUSIC: VOICE**

**24 CREDITS**

**Required Courses**
- **MUHI 200**: Survey of Music Literature, 2 credits
- **MUSC 499**: Recital, 1 credit
- **MUSP 203**: Minor Study, 1 to 4 credits
- **MUST 101**: Sight Singing and Ear Training, 1 credit
- **MUST 102**: Sight Singing and Ear Training, 1 credit
- **MUST 111**: Music Theory, 2 credits
- **MUST 112**: Music Theory, 2 credits

2 credits from **MUSP 325**: Secondary Study (Piano), 1 credit
- or
- **MUSP 326**: Group Piano, 1 credit

**Subtotal: 2**

2-4 credits from **MUSC 350**: Large Vocal Ensemble, 1 to 3 credits

**MINOR IN MUSIC RECORDING**

**26 CREDITS**

**Requirements List**
- **MMP 125**: Acoustics, 3 credits
- **MMP 235**: Recording Technology 1, 3 credits
- **MMP 236**: Recording Technology 2, 3 credits
- **MMP 330**: Live Sound and Recording, 3 credits
- **MMP 430**: Production Workshop, 3 credits
- **MUHI 105**: Music and Popular Culture in America, 3 credits
- **MUST 101**: Sight Singing and Ear Training, 1 credit
- **MUST 111**: Music Theory, 2 credits

5 credits from **MMP 100**: Survey of the Music Industry, 3 credits
- **MMP 201**: Pro Tools 101: An Introduction to Pro Tools, 1 credit
- **MMP 202**: Pro Tools 110: Pro Tools Production 1, 1 credit
- **MMP 220**: Introduction to Electronics and Studio Maintenance, 2 credits
- **MMP 335**: Mixing and Mastering, 3 credits
- **MMP 491**: Independent Study in Music Engineering Technology, 1 to 3 credits
- **MMP 492**: Special Topics in Music Media Production, 1 to 6 credits
- **MUSC 340**: Large Vocal Ensemble, 0.5 to 3 credits
- **MUSC 341**: Large Vocal Ensemble, 0.5 to 3 credits
- **MUSC 350**: Large Vocal Ensemble, 1 to 3 credits
- **MUSC 351**: Large Vocal Ensemble, 0.5 to 3 credits
- **MUSP 202**: Secondary Study, 1 to 4 credits
- **MUST 100**: Fundamentals of Music Theory, 3 credits

**Subtotal: 24**

*Not open to music majors.*
MUST 122  Acoustics for Musicians  3
MUST 241  Computer Music  3
Not open to majors in Music Media Production.

Subtotal: 26

CERTIFICATE IN ENTREPRENEURIAL STUDIES IN MUSIC
14 credits
(See Certificates (p. 24).)

THEATRE AND DANCE
W. Jenkins, Chairperson
bsu.edu/theatre

The Department of Theatre and Dance offers BFA degree programs in Acting, Musical Theatre, Dance, and Design and Technology, and BA/BS degree programs in Design and Technology, Theatre Creation, Theatre Education, Directing, Stage Management, and Dance. Minor studies are available in theatre and technical theatre. The Theatre Creation concentration is recommended for students intending to pursue careers in theatre history, criticism, playwriting, dramaturgy, arts management, or dual majors with telecommunications and creative writing among others, while the Theatre Education program is for students interested in teaching at the secondary school level.

An audition is required for students applying to the BFA majors in Acting, Musical Theatre, and Dance. An interview and portfolio review is required for students applying to the BFA in Design and Technology. BA/BS students in Dance are also required to audition, but the audition is for placement purposes only and does not determine admission status. Interviews are recommended but not required for admission into the other programs. Students in the Directing and Stage Management concentration enter in the concentration and are retained beyond the freshman year based on their end-of-year interview. All Theatre and Dance Majors are required to register for a senior level capstone course that is to be organized and completed under the supervision of the concentration coordinator.

BFA Acting and Musical Theatre students must pass a jury at the end of their freshman, sophomore, junior, and senior years to continue in these programs. BFA Dance students must pass a jury, portfolio review, and interview in the freshman, sophomore, junior and senior years to continue in the program. BFA Design and Technology students must present a portfolio at the end of each semester and must pass an exit portfolio review at the end of the senior year to complete the program. BA/BS Design and Technology students must present a portfolio every spring semester and must pass an exit interview to complete the program. Theatre Education students must complete interviews and other assessments as directed by Teacher's College. Directing, Stage Management, Theatre Creation, and BA/BS Dance students must complete interviews or portfolio reviews as directed by their concentration.

The production program features a stylistically varied, culturally diverse, and technologically enhanced series of shows within four performance venues. These plays, musicals, and dance concerts are integral to a student’s training and education. Students are expected to participate in department productions each semester.

The lowest acceptable grade in a course for credit toward a major or minor in theatre or Dance is C. Students are not permitted to complete multiple concentrations within the department. Students may complete a major and a minor within the department, but no more than six credits from the major can count towards the minor.

MAJOR IN DANCE (BA/BS)
50 CREDITS

Required Courses
DANC 200  The Dancer's Body  2
DANC 280  Musical Theatre Dance 1  2
DANC 287  Improvisation  2
DANC 300  Body Conditioning and Maintenance  2
DANC 301  Dance History 1  3
DANC 302  Dance History 2  3
DANC 315  Technique Studio  1
DANC 380  Dance Production  2
DANC 387  Choreography 1  2
DANC 401  Advanced Topics in Dance Studies  3
DANC 488  Dance Pedagogy  3
THEA 102  Branding and Marketing for the Theatre and Dance Artist  1
THEA 105  Freshman Experience  1
THEA 270  Basic Musicianship 1  2
THEA 280  Theatre and Dance Practicum  0 TO 1
THEA 405  Senior Experience  1
THEA 434  Immersion Experience  1 TO 12

Studio practice, 2 credits from
DANC 210  Ballet 1  2
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<thead>
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<tr>
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<td>DANC 310</td>
<td>Ballet 3</td>
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<td>DANC 410</td>
<td>Ballet 4</td>
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<tr>
<td>DANC 220</td>
<td>Modern 1</td>
<td>2</td>
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<tr>
<td>DANC 221</td>
<td>Modern 2</td>
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<td>DANC 320</td>
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<tr>
<td>DANC 230</td>
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<tr>
<td>DANC 231</td>
<td>Jazz 2</td>
<td>2</td>
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<tr>
<td>DANC 330</td>
<td>Jazz 3</td>
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<td>DANC 430</td>
<td>Jazz 4</td>
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<tr>
<td>DANC 211</td>
<td>Ballet 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 221</td>
<td>Modern 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 231</td>
<td>Jazz 2</td>
<td>2</td>
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<td>DANC 310</td>
<td>Ballet 3</td>
<td>2</td>
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<tr>
<td>DANC 320</td>
<td>Modern 3</td>
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<td>Jazz 3</td>
<td>2</td>
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<tr>
<td>DANC 332</td>
<td>Tap 2</td>
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<tr>
<td>DANC 410</td>
<td>Ballet 4</td>
<td>2</td>
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<tr>
<td>DANC 420</td>
<td>Modern 4</td>
<td>2</td>
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<td>DANC 430</td>
<td>Jazz 4</td>
<td>2</td>
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<tr>
<td>DANC 487</td>
<td>Choreography 2</td>
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<tr>
<td>DANC 490</td>
<td>Creative Project</td>
<td>2</td>
</tr>
<tr>
<td>DANC 496</td>
<td>Senior Thesis</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>THEA 326</td>
<td>Lighting Design and Technology 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 496</td>
<td>Directed Study in Theatre and Dance</td>
<td>1 TO 9</td>
</tr>
<tr>
<td>THEA 499</td>
<td>Internships in Theatre and Dance</td>
<td>0 TO 9</td>
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<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>6</strong></td>
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**MAJOR IN DANCE (BFA)**

**85 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DANC 200</td>
<td>The Dancer's Body</td>
<td>2</td>
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<tr>
<td>DANC 210</td>
<td>Ballet 1</td>
<td>2</td>
</tr>
<tr>
<td>DANC 211</td>
<td>Ballet 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 220</td>
<td>Modern 1</td>
<td>2</td>
</tr>
<tr>
<td>DANC 221</td>
<td>Modern 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 230</td>
<td>Jazz 1</td>
<td>2</td>
</tr>
<tr>
<td>DANC 231</td>
<td>Jazz 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 240</td>
<td>World Studio 1</td>
<td>1</td>
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<tr>
<td>DANC 241</td>
<td>World Studio 2</td>
<td>1</td>
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<tr>
<td>DANC 280</td>
<td>Musical Theatre Dance 1</td>
<td>2</td>
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<tr>
<td>DANC 281</td>
<td>Musical Theatre Dance 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 287</td>
<td>Improvisation</td>
<td>2</td>
</tr>
<tr>
<td>DANC 300</td>
<td>Body Conditioning and Maintenance</td>
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<tr>
<td>DANC 301</td>
<td>Dance History 1</td>
<td>3</td>
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<tr>
<td>DANC 302</td>
<td>Dance History 2</td>
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<tr>
<td>DANC 310</td>
<td>Ballet 3</td>
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<td>DANC 315</td>
<td>Technique Studio</td>
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<td>DANC 320</td>
<td>Modern 3</td>
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**Subtotal:** 50
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<tr>
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<tbody>
<tr>
<td>DANC 330</td>
<td>Jazz 3</td>
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<td>DANC 387</td>
<td>Choreography 1</td>
<td>2</td>
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<td>DANC 410</td>
<td>Ballet 4</td>
<td>2</td>
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<tr>
<td>DANC 420</td>
<td>Modern 4</td>
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<tr>
<td>DANC 430</td>
<td>Jazz 4</td>
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<tr>
<td>DANC 487</td>
<td>Choreography 2</td>
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<td>DANC 488</td>
<td>Dance Pedagogy</td>
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<tr>
<td>THEA 102</td>
<td>Branding and Marketing for the Theatre and Dance Artist</td>
<td>1</td>
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<tr>
<td>THEA 105</td>
<td>Freshman Experience</td>
<td>1</td>
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<td>THEA 107</td>
<td>Design Awareness for Theatre and Dance</td>
<td>3</td>
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<tr>
<td>THEA 223</td>
<td>Costume Design and Technology 1</td>
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<td>THEA 232</td>
<td>Acting 1</td>
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<tr>
<td>THEA 270</td>
<td>Basic Musicianship 1</td>
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<td>THEA 280</td>
<td>Theatre and Dance Practicum</td>
<td>0 TO 1</td>
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<tr>
<td>THEA 334</td>
<td>Studio 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 405</td>
<td>Senior Experience</td>
<td>1</td>
</tr>
<tr>
<td>THEA 434</td>
<td>Immersion Experience</td>
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1 credit from

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<tr>
<td>DANC 232</td>
<td>Tap 1</td>
<td>1</td>
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<td>DANC 332</td>
<td>Tap 2</td>
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Subtotal: 1

2 credits from

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<td>DANC 489</td>
<td>Mainstage Dance Performance</td>
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Subtotal: 2

4 credits from

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<td>Student-Directed Dance Performance</td>
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<td>DANC 389</td>
<td>Studio Dance Performance</td>
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<tr>
<td>DANC 489</td>
<td>Mainstage Dance Performance</td>
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</table>

Subtotal: 4

6 credits of directed electives as indicated below:

4 credits from

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DANC 310</td>
<td>Ballet 3</td>
<td>2</td>
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<tr>
<td>DANC 410</td>
<td>Ballet 4</td>
<td>2</td>
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<tr>
<td>or</td>
<td></td>
<td></td>
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<tr>
<td>DANC 320</td>
<td>Modern 3</td>
<td>2</td>
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<tr>
<td>DANC 420</td>
<td>Modern 4</td>
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2 credits from

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 330</td>
<td>Jazz 3</td>
<td>2</td>
</tr>
<tr>
<td>DANC 430</td>
<td>Jazz 4</td>
<td>2</td>
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Subtotal: 4

2 credits from

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<tr>
<td>DANC 310</td>
<td>Ballet 3</td>
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<tr>
<td>DANC 315</td>
<td>Technique Studio</td>
<td>1</td>
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<tr>
<td>DANC 320</td>
<td>Modern 3</td>
<td>2</td>
</tr>
<tr>
<td>DANC 330</td>
<td>Jazz 3</td>
<td>2</td>
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<tr>
<td>DANC 410</td>
<td>Ballet 4</td>
<td>2</td>
</tr>
<tr>
<td>DANC 420</td>
<td>Modern 4</td>
<td>2</td>
</tr>
<tr>
<td>DANC 430</td>
<td>Jazz 4</td>
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Subtotal: 85

MAJOR IN THEATRE (BA/BS)

58-62 CREDITS

Core requirements, 32 credits

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>Branding and Marketing for the Theatre and Dance Artist</td>
<td>1</td>
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<td>THEA 103</td>
<td>Aesthetics of Theatre 1</td>
<td>3</td>
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<tr>
<td>THEA 104</td>
<td>Aesthetics of Theatre 2</td>
<td>3</td>
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<tr>
<td>THEA 105</td>
<td>Freshman Experience</td>
<td>1</td>
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<tr>
<td>THEA 107</td>
<td>Design Awareness for Theatre and Dance</td>
<td>3</td>
</tr>
<tr>
<td>THEA 220</td>
<td>Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 232</td>
<td>Acting 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 250</td>
<td>Directing 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 280</td>
<td>Theatre and Dance Practicum</td>
<td>0 TO 1</td>
</tr>
<tr>
<td>THEA 317</td>
<td>Pre-Modern Theatre History to 1700</td>
<td>3</td>
</tr>
<tr>
<td>THEA 319</td>
<td>Modern Theatre History</td>
<td>3</td>
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<tr>
<td>THEA 405</td>
<td>Senior Experience</td>
<td>1</td>
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<tr>
<td>THEA 435</td>
<td>Performance of Shakespeare</td>
<td>3</td>
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</table>

Subtotal: 32

Complete one concentration

DESIGN AND TECHNOLOGY CONCENTRATION, 26-27 CREDITS

Required courses, 12 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>THEA 106</td>
<td>Styles and Concept</td>
<td>3</td>
</tr>
<tr>
<td>THEA 123</td>
<td>Elements of Theatrical Composition</td>
<td>3</td>
</tr>
<tr>
<td>THEA 321</td>
<td>Rendering for the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 380</td>
<td>Advanced Theatre and Dance</td>
<td>1 TO 2</td>
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</tbody>
</table>
Practicum 9

Discipline electives, 5-6 credits
THEA 221 Technical Direction 1 3
THEA 223 Costume Design and Technology 1 3
THEA 229 Stage Makeup Design and Technology 1 2
THEA 320 Scenic Design and Technology 1 3
THEA 326 Lighting Design and Technology 1 3
THEA 327 Sound Design and Technology 1 3

Subtotal: 5-6

Advanced electives, 3 credits
THEA 420 Scenic Design and Technology 2 3
THEA 423 Costume Design and Technology 2 3
THEA 426 Lighting Design and Technology 2 3
THEA 427 Sound Design and Technology 2 3
THEA 428 Technical Direction 2 3
THEA 429 Stage Makeup Design and Technology 2 3

Subtotal: 3

Design and technology electives, 6 credits
THEA 224 Costume Form and Materials 3
THEA 225 Theatrical Computer-Aided Drafting 3
THEA 291 Theatre Stage Management 3
THEA 299X Experimental/Developmental Topics 0 TO 12
THEA 329 Costume History 3
THEA 350 Directing for the Stage 2 3
THEA 226 Stage Properties 3
THEA 434 Immersion Experience 1 TO 12

Subtotal: 6

Up to one other THEA or DANC course not listed above as approved by the PDA or chairperson.

The BA/BS in Design and Technology is for those students who want a broad-based, liberal arts education in Theatre Design and Technology. Some students may pursue double majors both inside and outside the major. Design and technology concentration students must pass a portfolio review at the end of each spring semester and must pass an exit review at the end of the senior year to complete the concentration. Students failing to pass a jury review at the end of one academic year are considered on probationary status for the concentration; those failing to pass a portfolio review at the end of the succeeding year will be dropped from the concentration.

Subtotal: 58-59

DIRECTING/STAGE MANAGEMENT CONCENTRATION, 30 CREDITS

Directing concentration
Required courses, 24 credits
THEA 233 Acting 2 3
THEA 291 Theatre Stage Management 3
THEA 325 Dramaturgy 3
THEA 340 Playwriting 1 3
THEA 350 Directing for the Stage 2 3
THEA 352 Topics in Directing 3
THEA 353 Acting and Directing History 3
THEA 450 Directing for the Stage 3 3

Stage Management concentration
Required courses, 24 credits
THEA 223 Costume Design and Technology 1 3
THEA 291 Theatre Stage Management 3
THEA 320 Scenic Design and Technology 1 3
THEA 326 Lighting Design and Technology 1 3
THEA 327 Sound Design and Technology 1 3
THEA 391 Advanced Stage Management 3
THEA 392 Topics in Stage Management 3
THEA 491 Theatre Management 3

Electives
6 credits directing
6 credits stage management
Any THEA course, courses from other departments as approved by advisor

Subtotal: 6

Each directing/stage management concentration is designed as a pre-professional conservatory style program within a liberal arts education. Curriculum and performance opportunities are structured to prepare students for careers in directing or stage management or for advanced director training in quality graduate schools or conservatories. The directing/stage management concentration combines concentrated study in directing/management with required courses in other areas of theatre. In addition, all theatre students complete a strong core of liberal arts courses. Directing/stage management concentration students enter as theatrical studies concentration and apply for admittance to the directing/stage management concentration at the end of their first year. Students must pass a portfolio review at the end of their sophomore and junior years to continue in the concentration. A final project is required in their senior
year and may be any of the following: a departmentally supported production, a self-produced project in a found space; a project done in conjunction with Muncie Civic Theatre or similar venues approved by the area coordinator. The project can be a play or a musical and must be documented in a senior thesis.

Subtotal: 62

THEATRE CREATION CONCENTRATION, 26 CREDITS

Required courses, 13 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DANC</td>
<td>Any 100-level dance course other than DANC 100</td>
<td>1</td>
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<tr>
<td>THEA 233</td>
<td>Acting 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 322</td>
<td>Theatre of the 21st Century</td>
<td>3</td>
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<tr>
<td>THEA 325</td>
<td>Dramaturgy</td>
<td>3</td>
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<tr>
<td>THEA 340</td>
<td>Playwriting 1</td>
<td>3</td>
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Design/Technology electives

Choose one from the following

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<th>Title</th>
<th>Credits</th>
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<tr>
<td>THEA 223</td>
<td>Costume Design and Technology 1</td>
<td>3</td>
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<td>THEA 229</td>
<td>Stage Makeup Design and Technology 1</td>
<td>2</td>
</tr>
<tr>
<td>THEA 320</td>
<td>Scenic Design and Technology 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 326</td>
<td>Lighting Design and Technology 1</td>
<td>3</td>
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<tr>
<td>THEA 327</td>
<td>Sound Design and Technology 1</td>
<td>3</td>
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Electives, 10-11 credits

<table>
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<th>Course</th>
<th>Title</th>
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<tr>
<td>ENG 410</td>
<td>Advanced Screenwriting</td>
<td>3</td>
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<td>ENG 464</td>
<td>Shakespeare</td>
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<td>TCOM 487</td>
<td>Seminar in Digital Video Production</td>
<td>3 TO 6</td>
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<td>THEA 150</td>
<td>Introduction to Theatre Education</td>
<td>3</td>
</tr>
<tr>
<td>THEA 223</td>
<td>Costume Design and Technology 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 229</td>
<td>Stage Makeup Design and Technology 1</td>
<td>2</td>
</tr>
<tr>
<td>THEA 234</td>
<td>Introduction to the Singing Actor</td>
<td>3</td>
</tr>
<tr>
<td>THEA 291</td>
<td>Theatre Stage Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 318</td>
<td>Advanced Topics in Theatre and Dance</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>THEA 324</td>
<td>Musical Theatre History</td>
<td>3</td>
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<tr>
<td>THEA 329</td>
<td>Costume History</td>
<td>3</td>
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<tr>
<td>THEA 350</td>
<td>Directing for the Stage 2</td>
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</tr>
<tr>
<td>THEA 352</td>
<td>Topics in Directing</td>
<td>3</td>
</tr>
<tr>
<td>THEA 353</td>
<td>Acting and Directing History</td>
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<td>THEA 354</td>
<td>Directing for Young Audiences</td>
<td>3</td>
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<tr>
<td>THEA 380</td>
<td>Advanced Theatre and Dance Practicum</td>
<td>1 TO 9</td>
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</table>

Subtotal: 10-11

The theatre creation concentration is recommended for students wanting a broad-based, liberal-arts education in theatre. Some students may also pursue graduate study at the MA and PhD level. Students must earn and keep a 3.0 or better grade-point average for all courses required on the major after earning 36 credits or they will be placed on academic probation for one semester. If a student has two consecutive semesters on academic probation, they will be dismissed from the theatre creation concentration. Students must also submit a Theatre Creation Writing Portfolio in the fall of their sophomore, junior, and senior years. Failure to submit a portfolio will result in the student being placed on concentration probation. Failure to submit two portfolios in a row will result in removal from the concentration. Students may audition or submit portfolio reviews for other concentrations within the department.

Subtotal: 58

MAJOR IN THEATRE (BFA)

85-87 CREDITS

Core requirements, 32 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THEA 102</td>
<td>Branding and Marketing for the Theatre and Dance Artist</td>
<td>1</td>
</tr>
<tr>
<td>THEA 103</td>
<td>Aesthetics of Theatre 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 104</td>
<td>Aesthetics of Theatre 2</td>
<td>3</td>
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</tbody>
</table>
THEA 105  Freshman Experience  1
THEA 107  Design Awareness for Theatre and Dance  3
THEA 220  Stagecraft  3
THEA 232  Acting 1  3
THEA 250  Directing 1  3
THEA 280  Theatre and Dance Practicum  0 TO 1
THEA 317  Pre-Modern Theatre History to 1700  3
THEA 319  Modern Theatre History  3
THEA 405  Senior Experience  1
THEA 435  Performance of Shakespeare  3

Subtotal: 32

Complete one professional specialization

**ACTING CONCENTRATION, 53 CREDITS**

Required courses

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<tr>
<td>THEA 229</td>
<td>Stage Makeup Design and Technology 1</td>
<td>2</td>
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<td>THEA 233</td>
<td>Acting 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 332</td>
<td>Freshman Performance Lab</td>
<td>1</td>
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<tr>
<td>THEA 333</td>
<td>Introduction to Voice and Movement</td>
<td>2</td>
</tr>
<tr>
<td>THEA 334</td>
<td>Studio 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 335</td>
<td>Studio 2</td>
<td>3</td>
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<tr>
<td>THEA 336</td>
<td>Studio 3</td>
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<td>THEA 337</td>
<td>Studio 4</td>
<td>3</td>
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<td>THEA 338</td>
<td>Studio 5</td>
<td>3</td>
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<td>THEA 339</td>
<td>Studio 6</td>
<td>3</td>
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<tr>
<td>THEA 341</td>
<td>Acting Master Class</td>
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<tr>
<td>THEA 353</td>
<td>Acting and Directing History</td>
<td>3</td>
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<td>THEA 430</td>
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<td>THEA 431</td>
<td>Studio 8</td>
<td>3</td>
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<td>THEA 432</td>
<td>Studio 9</td>
<td>3</td>
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<td>THEA 433</td>
<td>Studio 10</td>
<td>3</td>
</tr>
<tr>
<td>THEA 434</td>
<td>Immersion Experience</td>
<td>1 TO 12</td>
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Electives, 5 credits from

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<tr>
<td>THEA 434</td>
<td>Immersion Experience</td>
<td>1 TO 12</td>
</tr>
<tr>
<td>THEA 496</td>
<td>Directed Study in Theatre and Dance</td>
<td>1 TO 9</td>
</tr>
<tr>
<td>THEA 499</td>
<td>Internships in Theatre and Dance</td>
<td>0 TO</td>
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Subtotal: 85

**DESIGN AND TECHNOLOGY CONCENTRATION, 52 CREDITS**

Required courses, 34 credits

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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THEA 106</td>
<td>Styles and Concept</td>
<td>3</td>
</tr>
<tr>
<td>THEA 123</td>
<td>Elements of Theatrical Composition</td>
<td>3</td>
</tr>
<tr>
<td>THEA 221</td>
<td>Technical Direction 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 223</td>
<td>Costume Design and Technology 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 229</td>
<td>Stage Makeup Design and Technology 1</td>
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</tr>
<tr>
<td>THEA 320</td>
<td>Scenic Design and Technology 1</td>
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</tr>
<tr>
<td>THEA 321</td>
<td>Rendering for the Theatre</td>
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</tr>
<tr>
<td>THEA 326</td>
<td>Lighting Design and Technology 1</td>
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<tr>
<td>THEA 327</td>
<td>Sound Design and Technology 1</td>
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<tr>
<td>THEA 380</td>
<td>Advanced Theatre and Dance Practicum</td>
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</tr>
<tr>
<td>THEA 434</td>
<td>Immersion Experience</td>
<td>1 TO 12</td>
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</tbody>
</table>

Advanced electives, 9 credits

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>THEA 420</td>
<td>Scenic Design and Technology 2</td>
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<tr>
<td>THEA 423</td>
<td>Costume Design and Technology 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 426</td>
<td>Lighting Design and Technology 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 427</td>
<td>Sound Design and Technology 2</td>
<td>3</td>
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<tr>
<td>Course Code</td>
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<td>Credits</td>
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<tr>
<td>THEA 428</td>
<td>Technical Direction 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 429</td>
<td>Stage Makeup Design and Technology 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 224</td>
<td>Costume Form and Materials</td>
<td>3</td>
</tr>
<tr>
<td>THEA 225</td>
<td>Theatrical Computer-Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 291</td>
<td>Theatre Stage Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 299X</td>
<td>Experimental/Developmental Topics</td>
<td>0 TO 12</td>
</tr>
<tr>
<td>THEA 329</td>
<td>Costume History</td>
<td>3</td>
</tr>
<tr>
<td>THEA 350</td>
<td>Directing for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>THEA 226</td>
<td>Stage Properties</td>
<td>3</td>
</tr>
<tr>
<td>THEA 496</td>
<td>Directed Study in Theatre and Dance</td>
<td>1 TO 9</td>
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</tbody>
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Subtotal: 9

Design and technology electives, 9 credits

<table>
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<tr>
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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>DANC 211</td>
<td>Ballet 2</td>
<td>2</td>
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<tr>
<td>DANC 310</td>
<td>Ballet 3</td>
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Three credits in increasing difficulty from

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<tbody>
<tr>
<td>DANC 130</td>
<td>Introduction to Jazz 1</td>
<td>1</td>
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<tr>
<td>DANC 131</td>
<td>Introduction to Jazz 2</td>
<td>1</td>
</tr>
<tr>
<td>DANC 230</td>
<td>Jazz 1</td>
<td>2</td>
</tr>
<tr>
<td>DANC 231</td>
<td>Jazz 2</td>
<td>2</td>
</tr>
<tr>
<td>DANC 330</td>
<td>Jazz 3</td>
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Two credits in increasing difficulty from

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<tr>
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<th>Course Title</th>
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<tr>
<td>DANC 132</td>
<td>Introduction to Tap 1</td>
<td>1</td>
</tr>
<tr>
<td>DANC 232</td>
<td>Tap 1</td>
<td>1</td>
</tr>
<tr>
<td>DANC 332</td>
<td>Tap 2</td>
<td>1</td>
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Additional requirements

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<thead>
<tr>
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<tr>
<td>THEA 229</td>
<td>Stage Makeup Design and Technology 1</td>
<td>2</td>
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<tr>
<td>THEA 233</td>
<td>Acting 2</td>
<td>3</td>
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<tr>
<td>THEA 270</td>
<td>Basic Musicianship 1</td>
<td>2</td>
</tr>
<tr>
<td>THEA 271</td>
<td>Basic Musicianship 2</td>
<td>2</td>
</tr>
<tr>
<td>THEA 272</td>
<td>Sight Singing/Ear Training 1</td>
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<tr>
<td>THEA 273</td>
<td>Sight Singing/Ear Training 2</td>
<td>1</td>
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<tr>
<td>THEA 274</td>
<td>Musical Theatre Ensemble</td>
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</tr>
<tr>
<td>THEA 324</td>
<td>Musical Theatre History</td>
<td>3</td>
</tr>
<tr>
<td>THEA 328</td>
<td>Voice Lesson</td>
<td>1 TO 2</td>
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<tr>
<td>THEA 332</td>
<td>Freshman Performance Lab</td>
<td>1</td>
</tr>
<tr>
<td>THEA 334</td>
<td>Studio 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA 335</td>
<td>Studio 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA 371</td>
<td>Singing Actor 1</td>
<td>2</td>
</tr>
<tr>
<td>THEA 372</td>
<td>Singing Actor 2</td>
<td>2</td>
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<tr>
<td>THEA 373</td>
<td>Musical Theatre Scene Study</td>
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</tr>
<tr>
<td>THEA 430</td>
<td>Studio 7</td>
<td>3</td>
</tr>
<tr>
<td>THEA 433</td>
<td>Studio 10</td>
<td>3</td>
</tr>
<tr>
<td>THEA 434</td>
<td>Immersion Experience</td>
<td>1 TO 12</td>
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</table>

Subtotal: 84

**MUSICAL THEATRE CONCENTRATION, 53 CREDITS**

Required courses

<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DANC 280</td>
<td>Musical Theatre Dance 1</td>
<td>2</td>
</tr>
<tr>
<td>DANC 281</td>
<td>Musical Theatre Dance 2</td>
<td>2</td>
</tr>
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</table>

Two credits in increasing difficulty from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 110</td>
<td>Introduction to Ballet 1</td>
<td>1</td>
</tr>
<tr>
<td>DANC 111</td>
<td>Introduction to Ballet 2</td>
<td>1</td>
</tr>
<tr>
<td>DANC 210</td>
<td>Ballet 1</td>
<td>2</td>
</tr>
</tbody>
</table>

Students are expected to take or place out of THEA 333.

The Musical Theatre BFA concentration is designed as a pre-professional, conservatory style program within a liberal arts education. This interdisciplinary concentration requires course work in dance, music, and theatre. Curriculum and performance opportunities are designed to prepare students for careers in musical theatre and/or advanced training at quality graduate schools or conservatories. Musical theatre students are selected for this degree program by audition. In addition, musical
theatre students must pass juried semester auditions in acting, dance, and singing. Students failing to pass a jury at the end of each semester are considered to be on probationary status; any student failing a jury or not maintaining the appropriate degree program grade-point average for a second semester will be dropped from the program. All students are to audition for all departmental production seasons except for fall of freshman year and spring of senior year. All seniors must take part in the THEA 434 Cabaret Class offered in the fall of their senior year.

Subtotal: 85

MINOR IN NEW WORKS FOR THE STAGE

19-21 CREDITS

Core requirements, 3 credits
THEA 340 Playwriting 1 3

Writing category, at least 6 credits from
ENG 285 Introduction to Creative Writing 3
ENG 308 Poetry Writing 3
ENG 310 Screenwriting 3
ENG 408 Advanced Poetry Writing 3
ENG 409 Creative Writing in the Community 3
ENG 410 Advanced Screenwriting 3
MMP 301 Songwriting 2
MUST 100 Fundamentals of Music Theory 3
MUST 101 Sight Singing and Ear Training 1
MUST 102 Sight Singing and Ear Training 1
MUST 111 Music Theory 2
MUST 112 Music Theory 2
MUST 221 Music Composition 1 2
MUST 222 Music Composition 2 2
THEA 380 Advanced Theatre and Dance Practicum 1 TO 9

Or other class approved by program coordinator

Subtotal: 6

Performance category, at least 5-6 credits from
DANC 287 Improvisation 2
THEA 232 Acting 1 3
THEA 233 Acting 2 3
THEA 339 Studio 6 3
THEA 434 Immersion Experience 1 TO 12

3 credits of DANC studio coursework as approved by program coordinator
3 credits of MUSP studio coursework as approved by program coordinator
3 credits of MUSC studio coursework as approved by program coordinator
Or other class approved by program coordinator

Subtotal: 5-6

Direction and Production category, at least 2-3 credits from
DANC 387 Choreography 1 2
DANC 487 Choreography 2 2
MMP 125 Acoustics 3
MMP 235 Recording Technology 1 3
MMP 236 Recording Technology 2 3
MMP 330 Live Sound and Recording 3
MMP 430 Production Workshop 3
THEA 250 Directing 1 3
THEA Experimental/Developmental Topics 299X 0 TO 12
THEA 322 Theatre of the 21st Century 3
THEA 325 Dramaturgy 3
THEA 350 Directing for the Stage 2 3
THEA 380 Advanced Theatre and Dance Practicum 1 TO 9
THEA 491 Theatre Management 3

Or other class approved by program coordinator

Subtotal: 2-3

At least 3 credits of electives from any of the above 3 categories

Subtotal: 3

This minor encourages the creation of new work for the stage through interdisciplinary practice. Students are required to take nineteen to twenty-one credits of coursework, only six of which can be counted for their major or other minors.

Before the student’s final semester, the student will submit to the coordinator a two to three page proposal for a final public presentation or dissemination of a cumulative portfolio of work created during the minor coursework. This portfolio can consist of a number of smaller works from various disciplines or a single interdisciplinary work. Dissemination of this portfolio must be completed before the minor is awarded.

Subtotal: 19-21

MINOR IN TECHNICAL THEATRE FOR NON-THEATRE MAJORS
21-22 CREDITS
The Minor in Technical Theatre for Non-Theatre Majors is designed to provide experience and study in the technical and design-related areas of theatre. This degree is limited to non-Theatre Majors.

Requirements List
THEA 100  Introduction to Theatre  3
THEA 220  Stagecraft  3
THEA 223  Costume Design and Technology 1  3
THEA 280  Theatre and Dance Practicum  0 TO 1
THEA 320  Scenic Design and Technology 1  3
THEA 326  Lighting Design and Technology 1  3
5-6 credits from
THEA 106  Styles and Concept  3
THEA 123  Elements of Theatrical Composition  3
THEA 221  Technical Direction 1  3
THEA 224  Costume Form and Materials  3
THEA 225  Theatrical Computer-Aided Drafting  3
THEA 229  Stage Makeup Design and Technology 1  2
THEA 291  Theatre Stage Management  3
THEA 299X  Experimental/Developmental Topics  0 TO 12
THEA 320  Scenic Design and Technology 1  3
THEA 321  Rendering for the Theatre  3
THEA 326  Lighting Design and Technology 1  3
THEA 327  Sound Design and Technology 1  3
THEA 329  Costume History  3
THEA 350  Directing for the Stage 2  3
THEA 380  Advanced Theatre and Dance Practicum  1 TO 9
THEA 420  Scenic Design and Technology 2  3
THEA 426  Lighting Design and Technology 2  3
THEA 427  Sound Design and Technology 2  3
THEA 429  Stage Makeup Design and Technology 2  3
Subtotal: 5-6

Total Credit Hours: 21-22

MINOR IN TECHNICAL THEATRE FOR THEATRE MAJORS

20-21 CREDITS
The Minor in Technical Theatre for Theatre Majors is available to all theatre majors who are not in the Design and Technology concentration. No more than six credits of courses applied toward a student’s major in theatre can be counted towards the Technical Theatre for Theatre Majors.

20-21 credits from
THEA 106  Styles and Concept  3
THEA 123  Elements of Theatrical Composition  3
THEA 221  Technical Direction 1  3
THEA 223  Costume Design and Technology 1  3
THEA 224  Costume Form and Materials  3
THEA 225  Theatrical Computer-Aided Drafting  3
THEA 229  Stage Makeup Design and Technology 1  2
THEA 291  Theatre Stage Management  3
THEA 299X  Experimental/Developmental Topics  0 TO 12
THEA 320  Scenic Design and Technology 1  3
THEA 321  Rendering for the Theatre  3
THEA 326  Lighting Design and Technology 1  3
THEA 327  Sound Design and Technology 1  3
THEA 329  Costume History  3
THEA 350  Directing for the Stage 2  3
THEA 380  Advanced Theatre and Dance Practicum  1 TO 9
THEA 420  Scenic Design and Technology 2  3
THEA 426  Lighting Design and Technology 2  3
THEA 427  Sound Design and Technology 2  3
THEA 429  Stage Makeup Design and Technology 2  3
Subtotal: 20-21

Not open to students in the Design and Technology concentration.

Total Credit Hours: 20-21

MINOR IN THEATRE

19-20 CREDITS
Required Courses
THEA 103  Aesthetics of Theatre 1  3
THEA 104  Aesthetics of Theatre 2  3
THEA 220  Stagecraft  3
THEA 232  Acting 1  3
THEA 280  Theatre and Dance Practicum  0 TO 1

Subtotal: 14

Electives, 5-6 credits from any courses in THEA, other than THEA 100. No more than one elective course at the 100-level will be counted.

Subtotal: 5-6

Teacher Education

Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for the descriptions of these courses and other professional requirements of the teacher education program.

TEACHING MAJOR IN THEATRE (BA/BS)

85-86 CREDITS

Core requirements, 32 credits
THEA 102  Branding and Marketing for the Theatre and Dance Artist  1
THEA 103  Aesthetics of Theatre 1  3
THEA 104  Aesthetics of Theatre 2  3
THEA 105  Freshman Experience  1
THEA 107  Design Awareness for Theatre and Dance  3
THEA 220  Stagecraft  3
THEA 232  Acting 1  3
THEA 250  Directing 1  3
THEA 280  Theatre and Dance Practicum  0 TO 1
THEA 317  Pre-Modern Theatre History to 1700  3
THEA 319  Modern Theatre History  3
THEA 405  Senior Experience  1
THEA 435  Performance of Shakespeare  3

Subtotal: 32

Required courses, 6 credits
THEA 350  Directing for the Stage 2  3
THEA 354  Directing for Young Audiences  3

Subtotal: 6

THEA 223  Costume Design and Technology 1  3
THEA 229  Stage Makeup Design and Technology 1  2
THEA 233  Acting 2  3
THEA 318  Advanced Topics in Theatre and Dance  3 TO 6
THEA 324  Musical Theatre History  3
THEA 329  Costume History  3
THEA 340  Playwriting 1  3
THEA 352  Topics in Directing  3
THEA 353  Acting and Directing History  3
THEA 450  Directing for the Stage 3  3
THEA 491  Theatre Management  3

Subtotal: 5-6

THEA 318 may be taken twice for fulfillment of electives, but each must be on a different topic.

Subtotal: 43-44

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

Professional education sequence, 42 credits
EDFO 420  Social, Historical, and Philosophical Foundations of Education  3
EDJH 385  Principles of Teaching in the Middle School  3
EDMU 205  Introduction to Multicultural Education  3
EDPS 251  Human Growth and Development for Secondary Education  3
EDPS 390  Educational Psychology  3
EDSE 320  Reading for Diverse Learners in Secondary Content Classes  3
EDSE 380  Principles of Teaching in the Secondary School  3
THEA 150  Introduction to Theatre Education  3
THEA 295  Introduction to Teaching Methods for Theatre  3
THEA 396  Teaching Methods and Administration of School Theatre Programs  3
Student teaching  12

Subtotal: 42

See Professional Education Assessment/Decision Points, (p. 234) for additional information.

Subtotal: 85-86
College of Health

M. Whaley, Dean; J. Kandiah, Associate Dean; T. Mahon, Associate Dean

The College of Health consists of the following departments and schools: Department of Counseling Psychology, Social Psychology, and Counseling; Department of Military Science; Department of Nutrition and Health Science; Department of Social Work; Department of Speech Pathology and Audiology; School of Kinesiology, and School of Nursing.

COUNSELING PSYCHOLOGY, SOCIAL PSYCHOLOGY, AND COUNSELING

S. Bowman, Chairperson
bsu.edu/counselingpsych

The Department of Counseling Psychology, Social Psychology, and Counseling offers a Minor in Interpersonal Relations. The minor introduces students to basic psychological principles and techniques to help them understand themselves and their relationships with others.

MINOR IN INTERPERSONAL RELATIONS

15 CREDITS

Complete one concentration

Concentration 1: 15 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSY 230</td>
<td>Human Relationship Development</td>
<td>3</td>
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<tr>
<td>CPSY 360</td>
<td>Interrelational Aspects of Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 400</td>
<td>Fundamentals of Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 420</td>
<td>Techniques of Psychological Interventions</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 470</td>
<td>Introduction to Cross-Cultural Counseling</td>
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</tr>
<tr>
<td>CPSY 490</td>
<td>Issues in Counseling</td>
<td>1 TO 6</td>
</tr>
</tbody>
</table>

Subtotal: 15

Concentration 2: 15 credits

9-12 credits from

<table>
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<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CPSY 230</td>
<td>Human Relationship Development</td>
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<tr>
<td>CPSY 360</td>
<td>Interrelational Aspects of Sexuality</td>
<td>3</td>
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<tr>
<td>CPSY 400</td>
<td>Fundamentals of Counseling</td>
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</tr>
<tr>
<td>CPSY 420</td>
<td>Techniques of Psychological Interventions</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 470</td>
<td>Introduction to Cross-Cultural Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 490</td>
<td>Issues in Counseling</td>
<td>1 TO 6</td>
</tr>
</tbody>
</table>

Subtotal: 9-12

3-6 credits of electives from courses in other departments as approved by the counseling psychology department

Subtotal: 3-6

SCHOOL OF KINESIOLOGY

T. Weidner, Chairperson
bsu.edu/kinesiology

The School of Kinesiology offers academic programs in aquatics, exercise science, sport administration, and health and physical education (all-grade teaching). In addition, minors are available in aquatics, coaching, gerontology, scuba, and workplace wellness and certificates are available in aquatic instruction, aquatic operations, and scuba leadership. An exit assessment must be completed by students in all academic programs in the School.

The University Core Curriculum requirement in physical fitness and wellness is delivered by the School and consists of one PFW course (2 credits). Students are not permitted to substitute athletics, band, or similar activities for the physical fitness and wellness University Core Curriculum requirement.

MAJOR IN EXERCISE SCIENCE (BA/BS)

71-87 credits

EXERCISE SCIENCE, 71-87 CREDITS

Admission and retention standards

- Completion of BIO 111, PSYS 100, CHEM 101 or 111, EXSC 292 or ANAT 201, EXSC 293 each with a grade of C (2.0) or better, EXSC 190, with a B or better, and none of these courses can be repeated more than one time in order to apply to the Exercise Science Major. Transfer courses with the EXSC prefix or equivalent will not be accepted into the EXSC major except by permission of the program coordinator.
- Attain minimum overall GPA of 2.75 and EXSC major GPA of 3.0 at time of application.
- Completion of Exercise Science Program application.

Once admitted into the exercise science major the following guidelines will be used to evaluate each student in order to remain in the major.

- Maintain a minimum exercise science grade-point average of 3.0 and an overall grade-point average of 2.75. A student dropping below this mark will be placed on probation for one semester to improve grade-point average.
• No grade lower than a C will be accepted in any course within the exercise science major.
• Courses within the major may only be repeated one time.
• Internship enrollment requires completion of all required courses, the Intern Ready program, 100 observation hours, and approval of the Internship Coordinator.

Pre-EXSC program selection, 20-21 credits

BIO 111 Principles of Biology 1 4
CHEM 101 General, Organic, and Biochemistry for the Health Sciences or
CHEM 111 General Chemistry 1 4
EXSC 190 Foundations of Exercise Science 3
EXSC 293 Foundations of Physiology and Exercise 3
EXSC 292 Anatomy 3 or
ANAT 201 Fundamentals of Human Anatomy 3
PSYS 100 Introduction to Psychological Science 3

Exercise science program selection, 24 credits

EXSC 147 Resistance Training Leadership 3
EXSC 201 Human Performance Concepts and Assessment 3
EXSC 202 Fitness Assessment in Exercise Science 3
EXSC 294 Functional Anatomy 3
EXSC 301 Fundamentals of Exercise Prescription 3
EXSC 420 Sports Performance 3
EXSC 493 Advanced Concepts in Exercise Physiology 3
NUTR 340 Principles of Human Nutrition 3
EXSC 479 Exercise Science Internship 12

Electives, 15-25 credits

Choose one of the following elective concentrations.

Exercise Science: Basic and Applied Science concentration, 15 credits from

BIO 112 Principles of Biology 2 4
CHEM 112 General Chemistry 2 4
CHEM 230 Organic Chemistry for the Life Sciences 3
CHEM 241 Organic Chemistry Laboratory 1: Fundamental Techniques 1
CHEM 231 Organic Chemistry for Molecular-Based Sciences: Part 1 3
CHEM 241 Organic Chemistry Laboratory 1: Fundamental Techniques 1
CHEM 232 Organic Chemistry for Molecular-Based Sciences: Part 2 3
CHEM 242 Organic Chemistry Laboratory 2: Synthesis and Characterization 1
CHEM 360 Essentials of Biochemistry 3 and
CHEM 361 Introductory Biochemistry Laboratory 1
EXSC 401 Principles of the Electrocardiogram 3
EXSC 414 Biomechanics of Human Movement 3
NUTR 444 Sports Nutrition and Weight Control 3
PHYC 110 General Physics 1 4
PHYC 112 General Physics 2 4
PHYS 205 Fundamentals of Human Physiology 3
PHYS 215 Human Physiology 5
PHYS 411 Endocrinology 3
PHYS 413 Renal Physiology 3
PHYS 414 Cardiovascular Physiology 3
PSYS 241 Statistics 3

Subtotal: 15

Exercise Science: Health and Fitness concentration, 16 credits from

EXSC 148 Group Fitness Instructor 1

Subtotal: 1
**15 credits from Fitness Corporate Wellness**

<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AQUA 316</td>
<td>Aquatic Fitness Instructor</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 310</td>
<td>Applied Sports Performance</td>
<td>3</td>
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<tr>
<td>EXSC 360</td>
<td>Exercise Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 401</td>
<td>Principles of the Electrocardiogram</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 414</td>
<td>Biomechanics of Human Movement</td>
<td>3</td>
</tr>
<tr>
<td>GERO 430</td>
<td>Aging Well: Adaptations in Later Life</td>
<td>3</td>
</tr>
<tr>
<td>GERO 445</td>
<td>Health, Wellness, and Aging</td>
<td>3</td>
</tr>
<tr>
<td>HSC 462</td>
<td>Health Promotion in the Worksite</td>
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</tr>
<tr>
<td>KINE 240</td>
<td>Athletic Safety and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td>KINE 250</td>
<td>First Aid</td>
<td>2</td>
</tr>
<tr>
<td>KINE 299X</td>
<td>Experimental/Developmental Topics</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>NUTR 360</td>
<td>Nutrition and Cardiometabolic Disease</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 444</td>
<td>Sports Nutrition and Weight Control</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 448</td>
<td>Nutrition and Weight Management</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 201</td>
<td>Improving Worker Wellbeing: A Multidisciplinary Approach</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 405</td>
<td>Workplace Wellness Coaching</td>
<td>3</td>
</tr>
</tbody>
</table>

**Older Adult Fitness/Wellness**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 316</td>
<td>Aquatic Fitness Instructor</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 302</td>
<td>Physical Activity Throughout the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 360</td>
<td>Exercise Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 414</td>
<td>Biomechanics of Human Movement</td>
<td>3</td>
</tr>
<tr>
<td>GERO 430</td>
<td>Aging Well: Adaptations in Later Life</td>
<td>3</td>
</tr>
<tr>
<td>GERO 445</td>
<td>Health, Wellness, and Aging</td>
<td>3</td>
</tr>
<tr>
<td>KINE 240</td>
<td>Athletic Safety and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 448</td>
<td>Nutrition and Weight Management</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 201</td>
<td>Improving Worker Wellbeing: A Multidisciplinary Approach</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 405</td>
<td>Workplace Wellness Coaching</td>
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</table>

**Business Management**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENT 241</td>
<td>The Entrepreneurial Experience</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 210</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISOM 251</td>
<td>Introductory Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 361</td>
<td>Foundations of Human Resource Management and Employee Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 15**

Exercise Science: Pre-Physical Therapy concentration, 29-30 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
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<tr>
<td>MATH 181</td>
<td>Elementary Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 241</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>NUR 101</td>
<td>Terminology for Health Care Professionals and Consumers</td>
<td>2</td>
</tr>
<tr>
<td>CC 102</td>
<td>Latin and Greek Based Bioscientific Terminology</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 112</td>
<td>General Physics 2</td>
<td>4</td>
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<tr>
<td>PHYS 215</td>
<td>Human Physiology</td>
<td>5</td>
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<tr>
<td>PSYS 321</td>
<td>Developmental Psychology</td>
<td>3</td>
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</table>

Exercise Science: Pre-Occupational Therapy concentration, 23-24 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDPS 270</td>
<td>Human Development Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NUR 101</td>
<td>Terminology for Health Care Professionals and Consumers</td>
<td>2</td>
</tr>
<tr>
<td>CC 102</td>
<td>Latin and Greek Based Bioscientific Terminology</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 215</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>PSYS 241</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 382</td>
<td>Applied Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HSC 387</td>
<td>Quantitative Methods and</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 29-30**

Students take ANAT 201 in pre-major and complete 29-30 credits from

Students take ANAT 201 in pre-major and complete 23-24 credits from
Epidemiology in Health Promotion
PSYS 318  Psychopathology  3
SOC 100  Principles of Sociology  3

Subtotal: 23-25

Subtotal: 71-87

MAJOR IN AQUATICS (BA/BS)
Admission and Retention standards
- Completion of BIO 111, PSYS 100, EXSC 292 or ANAT 201, CHEM 101 or 111, EXSC 190 (each with a C or better grade).
- Attain minimum overall GPA of 2.5 and EXSC major GPA of 2.75 at time of application.
- Completion of EXSC Advanced Program application.
Only students admitted into the EXSC program will be eligible to take Advanced Program classes. Once admitted students will be expected to maintain the following standards in order to remain in the program:
- Maintain overall GPA of 2.5 and EXSC major GPA of 2.75.
- Earn a C or better in each class in the major.
Failure to attain these standards may result in dismissal from the program. Students may retake courses in order to improve academic standing, or appeal to the program coordinator for a waiver of one or more requirements.

59 CREDITS
Core requirements, 15 credits
AQUA 190  Introduction to Aquatics  3
AQUA 479  Aquatics Internship  12

Subtotal: 15

Required courses, 34 credits
AQUA 216  Lifeguard Training  3
AQUA 260  Emergency Medical Responder  3
AQUA 313  Biomechanics of Aquatics  2
AQUA 315  Water Safety Instructor (WSI)  3
AQUA 316  Aquatic Fitness Instructor  3
AQUA 404  Lifeguard Instructor (LGI)  3
AQUA 454  Swimming Pool Operation and Maintenance  3
AQUA 455  Aquatic Facilities Management and Programming  3
AQUA 457  Aquatic Facility Design  2
AQUA 458  Aquatic Leadership and Staff Development  3
EXSC 292  Anatomy  3
EXSC 294  Functional Anatomy  3

Subtotal: 34

Directed electives, 10 credits from
AQUA 120  Aquatics Special Topics/Workshop  1 TO 3
AQUA 212  Aquatic Recreation Activities  3
AQUA 219  Aquatic Sports Officiating  1
AQUA 220  Open Water Scuba  2
AQUA 221  Advanced SCUBA Diver  2
AQUA 224  Divemaster  2
AQUA 225  Assistant Scuba Instructor  2
AQUA 301  Instructor of CPR and First Aid  2
AQUA 314  Teaching and Coaching Swimming and Diving  3
AQUA 456  Camp Waterfront Administration  2

Subtotal: 10

Aquatic major students may not earn aquatic minors.
Total Credit Hours: 59

MAJOR IN SPORT ADMINISTRATION (BA/BS)
75-78 CREDITS
Admission requirements
- Completion of ECON 201; and ENG 104 with a C or better.
- Completion of ACC 201; and SPTA 190 with a C- or better.
- Completion of at least 8 hours of field experience in the sport industry.
- Completion of Ball State University Sport Administration Program application.
- Attain a minimum overall grade-point average of 2.5 at the time of application.

Once admitted into the sport administration major the following guidelines will be used to evaluate each student in order to remain in this program of study. Only students admitted into the program will have access to advanced course work (200-400 level) in the area of sport administration (SPTA prefix).
- Maintain of an overall grade-point average of 2.5 or higher.
- No grade lower than a C- will be accepted in any course within the sport administration and business core courses.
- Maintain of an overall grade-point average of 2.0 or higher within the business minor requirement.
- Internship (SPTA 479) enrollment requires senior standing and approval of the coordinator.
### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>BL 260</td>
<td>Principles of Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 190</td>
<td>Introduction to Sport Administration</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 195</td>
<td>Computer and Technology Applications for Sport Administration</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 205</td>
<td>Sport History</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 290</td>
<td>Revenue Generation in Sport</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 300</td>
<td>Sport Law</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 303</td>
<td>Sport Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 305</td>
<td>Sport Finance</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 345</td>
<td>Sport Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 402</td>
<td>Event and Facility Management in Sport</td>
<td>3</td>
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<tr>
<td>SPTA 448</td>
<td>Sport Governance</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 470</td>
<td>International and Comparative Administration of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 479</td>
<td>Sport Administration Internship</td>
<td>12</td>
</tr>
<tr>
<td>SPTA 485</td>
<td>Sport Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 63**

Students must also complete the additional credits from one of the following minors:
- Foundations of Business (12 credits)
- Foundations of Management (12 credits)
- Marketing (15 credits)
- Professional Selling (15 credits)

**Subtotal: 75-78**

### MINOR IN AQUATICS

#### 18 CREDITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 190</td>
<td>Introduction to Aquatics</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 216</td>
<td>Lifeguard Training</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 315</td>
<td>Water Safety Instructor (WSI)</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 454</td>
<td>Swimming Pool Operation and Maintenance</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

Complete 6 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 212</td>
<td>Aquatic Recreation Activities</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 215</td>
<td>Intermediate Swimming</td>
<td>1</td>
</tr>
<tr>
<td>AQUA 219</td>
<td>Aquatic Sports Officiating</td>
<td>1</td>
</tr>
<tr>
<td>AQUA 313</td>
<td>Biomechanics of Aquatics</td>
<td>2</td>
</tr>
<tr>
<td>AQUA 314</td>
<td>Teaching and Coaching Swimming and Diving</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 316</td>
<td>Aquatic Fitness Instructor</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 404</td>
<td>Lifeguard Instructor (LGI)</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 455</td>
<td>Aquatic Facilities Management and Programming</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 456</td>
<td>Camp Waterfront Administration</td>
<td>2</td>
</tr>
<tr>
<td>AQUA 457</td>
<td>Aquatic Facility Design</td>
<td>2</td>
</tr>
<tr>
<td>AQUA 458</td>
<td>Aquatic Leadership and Staff Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 18**

### MINOR IN COACHING

#### Admission Requirements

- Attain minimum overall GPA of 2.5 at time of application.
- Completion of KINE 231 with a C or better.
- Completion of at least 10 hours of field experience in competitive athletic coaching.
- Completion of Ball State University Coaching Minor application.

#### 18 CREDITS

**Coaching Essentials**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINE 231</td>
<td>Foundations of Coaching</td>
<td>3</td>
</tr>
<tr>
<td>KINE 240</td>
<td>Athletic Safety and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td>KINE 409</td>
<td>Psychological/Social Issues in Sport</td>
<td>3</td>
</tr>
<tr>
<td>KINE 433</td>
<td>Coaching Internship</td>
<td>3</td>
</tr>
<tr>
<td>SPTA 190</td>
<td>Introduction to Sport Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Coaching Electives**

- 3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 315</td>
<td>Water Safety Instructor (WSI)</td>
<td>3</td>
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<tr>
<td>EXSC 292</td>
<td>Anatomy</td>
<td>3</td>
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<tr>
<td>NUTR 275</td>
<td>Personal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 340</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
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**Subtotal: 12**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PEP 227</td>
<td>Introduction to Adapted Physical Education/Activity</td>
<td>3</td>
</tr>
<tr>
<td>PEP 291</td>
<td>Motor Development and Learning Across the Lifespan</td>
<td>3</td>
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</table>

**Subtotal: 3**

**Program Requirements**

A Minor in Coaching is awarded to students who meet the following requirements. Students must:

- Maintain overall GPA 2.5 and coaching minor GPA of 2.75.
- Complete 18 credits of course work prescribed above.
- Students may only use three credits from their major for completion of their Coaching Minor.
- Provide proof of current CPR, First Aid, and AED certification. The completion of PEP 250 may satisfy this requirement.
- Obtain a National Federation of State High School Associations (NFHS) or an American Sport Education Program (ASEP) sport certification in one of the following: baseball, basketball, football, golf, lacrosse, soccer, softball, swimming and diving, tennis, track and field, volleyball, or wrestling.

**Minor in Gerontology**

**18 Credits**

12 credits from core courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 430</td>
<td>Aging Well: Adaptations in Later Life</td>
<td>3</td>
</tr>
<tr>
<td>GER 440</td>
<td>Women and Aging</td>
<td>3</td>
</tr>
<tr>
<td>GER 435</td>
<td>Aging in Communities</td>
<td>3</td>
</tr>
<tr>
<td>GER 445</td>
<td>Health, Wellness, and Aging</td>
<td>3</td>
</tr>
<tr>
<td>GER 499</td>
<td>Internship in Gerontology</td>
<td>1 TO 6</td>
</tr>
</tbody>
</table>

6 credits of electives from approved courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDPS 430</td>
<td>Mental Health</td>
<td>3</td>
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<tr>
<td>EXSC 493</td>
<td>Advanced Concepts in Exercise Physiology</td>
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</tr>
<tr>
<td>ECYF 202</td>
<td>Child and Family Wellness</td>
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<td>ECYF 250</td>
<td>Family Relations</td>
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<td>GER 415</td>
<td>Technology in Aging</td>
<td>3</td>
</tr>
<tr>
<td>GER 440</td>
<td>Women and Aging</td>
<td>3</td>
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<td>HOSP 210</td>
<td>Customer Service</td>
<td>3</td>
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<tr>
<td>HSC 368</td>
<td>Consumer Health Issues</td>
<td>3</td>
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<td>HSC 371</td>
<td>Death and Dying</td>
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<td>MKG 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKG 310</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 340</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 315</td>
<td>Senior Housing: Design, Marketing, and Management</td>
<td>3</td>
</tr>
<tr>
<td>POLS 350</td>
<td>Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>SOC 341</td>
<td>Sociology of Health and Illness</td>
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</tr>
<tr>
<td>SOC 431</td>
<td>Aging and the Life Course</td>
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</table>

**Subtotal: 6**

**Minor in Scuba**

**18 Credits**

Common core, 12 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 190</td>
<td>Introduction to Aquatics</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 216</td>
<td>Lifeguard Training</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 315</td>
<td>Water Safety Instructor (WSI)</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 454</td>
<td>Swimming Pool Operation and Maintenance</td>
<td>3</td>
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Take all of the following

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AQUA 220</td>
<td>Open Water Scuba</td>
<td>2</td>
</tr>
<tr>
<td>AQUA 221</td>
<td>Advanced SCUBA Diver</td>
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</tr>
<tr>
<td>AQUA 355</td>
<td>Internship in Aquatics</td>
<td>1 TO 3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Minor in Workplace Wellness**

**16 Credits**

Workplace Wellness

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWIN 201</td>
<td>Improving Worker Wellbeing: A Multidisciplinary Approach</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 305</td>
<td>Introduction to Workplace Wellness Planning</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 310</td>
<td>Workplace Wellness Administration</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 405</td>
<td>Workplace Wellness Coaching</td>
<td>3</td>
</tr>
<tr>
<td>WWIN 498</td>
<td>Senior Seminar in Workplace Wellness</td>
<td>1</td>
</tr>
</tbody>
</table>

Experience Learning, 3 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELN 325</td>
<td>Community Collaboration and Service Learning in Wellness Management</td>
<td>3</td>
</tr>
</tbody>
</table>

or
Teacher Education
Teaching programs require additional courses in educational methods. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for the descriptions of these courses and other professional requirements. In addition, teaching majors must complete all Decision Point requirements.

Technology expenses are required.

HEALTH AND PHYSICAL EDUCATION TEACHER EDUCATION — DECISION POINT REQUIREMENTS

Decision Point 1:
- PEP 161 – satisfactory dispositions; C or better.
- HSC 160 – C or better.
- Creation of on-line portfolio.
- Fitness Test – associated with Fitness/Activity (PEP 161).
- Demonstrate adequate swim skills or take AQUA 214/AQUA 215.

Decision Point 2:
- CASA passed.
- Overall GPA of 3.0 in at least 45 credits.
- GPA of 2.75 in major.
- HSC 290 – satisfactory dispositions; C or better.
- PEP 209, PEP 227, PEP 291 satisfactory dispositions; C or better.
- Fitness Test – associated with Fitness/Activity (PEP 252).
- C or better in 100/200-level professional education courses (EDMU 205 and EDPS 250).
- C or better in COMM 210.
- Approval of application for admission in teaching curriculum.
- Declaration of teaching major via Degree Works.
- Satisfactorily complete second level of portfolio review.

Decision Point 3:
- Overall GPA of 3.0 in at least 93 credits.
- GPA of 3.0 in major.
- Completion of Writing Proficiency Program.
- Within 9 credits of completion of content courses.
- Satisfactorily complete third level of portfolio review.
- Meet fitness testing requirements (PEP 399).
- Portfolio – plan, delivery, reflection, and leadership potential.
- HSC 295, HSC 363, HSC 395 – satisfactory dispositions; C or better.
- HSC 261, HSC 367, and NUTR 240 – C or better.
- PEP 310, PEP 394, PEP 399, PEP 400 satisfactory dispositions; C or better.
- Lesson plan (HSC 295, PEP 394/PEP 399).
- Assessment (PEP 310).
- Evidence of CPR certification.

Decision Point 4 (after student teaching):
- Satisfactorily complete student teaching portfolio review.
- Overall GPA of 3.0.
- GPA of 3.0 in major.
- Complete all degree requirements.
- Current state licensure testing requirements (content and pedagogy).
- Exit interview/survey.

Approval from student teaching supervisor and University supervisor for graduation.

TEACHING MAJOR IN HEALTH AND PHYSICAL EDUCATION (BA/BS)

92 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXSC 292</td>
<td>Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 293</td>
<td>Foundations of Physiology and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSC 160</td>
<td>Fundamentals of Human Health</td>
<td>3</td>
</tr>
<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
</tr>
<tr>
<td>HSC 290</td>
<td>Evaluation and Assessment in Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>HSC 295</td>
<td>Reading, Technology, and Instructional Strategies in School Health</td>
<td>3</td>
</tr>
<tr>
<td>HSC 363</td>
<td>Current Issues in Administration and Coordination of Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>HSC 367</td>
<td>Drug Dependency and Abuse</td>
<td>3</td>
</tr>
<tr>
<td>HSC 395</td>
<td>Methods, Materials, and Curriculum for Teaching Health Education</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 240</td>
<td>Nutrition for Educators</td>
<td>3</td>
</tr>
<tr>
<td>PEP 158</td>
<td>Teaching Dance and Gymnastics</td>
<td>2</td>
</tr>
<tr>
<td>PEP 161</td>
<td>Foundations and Principles of Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>PEP 209</td>
<td>Introduction to Teaching Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PEP 222</td>
<td>Teaching Field and Court Invasion Games</td>
<td>2</td>
</tr>
<tr>
<td>PEP 227</td>
<td>Introduction to Adapted Physical Education/Activity</td>
<td>3</td>
</tr>
<tr>
<td>PEP 232</td>
<td>Teaching Net and Wall Games</td>
<td>2</td>
</tr>
<tr>
<td>PEP 252</td>
<td>Teaching Physical Fitness and Fitness Activities</td>
<td>3</td>
</tr>
<tr>
<td>PEP 291</td>
<td>Motor Development and Learning Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>PEP 310</td>
<td>Formal Assessment in Health, Physical Education, and Physical Activity Settings</td>
<td>3</td>
</tr>
<tr>
<td>PEP 394</td>
<td>Teaching Physical Education in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>PEP 399</td>
<td>Teaching Physical Education in the High School</td>
<td>3</td>
</tr>
<tr>
<td>PEP 400</td>
<td>Introduction to Curriculum Design in Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>PEP 444</td>
<td>Developing the Health and Physical Education Classroom Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 65**

Demonstrates competent swimming skills or takes AQUA 214 or AQUA 215. Demonstrates CPR and first aid certification.

**ALL-GRADE EDUCATION PROGRAM**

Professional education sequence, 27 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAL 470</td>
<td>Student Teaching: All-Grade</td>
<td>6 TO 7</td>
</tr>
<tr>
<td>EDFS 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 250</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 390</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDJH 385</td>
<td>Principles of Teaching in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 465</td>
<td>Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade</td>
<td>3 OR 5</td>
</tr>
</tbody>
</table>

**Subtotal: 27**

Subtotal: 92

See Professional Education Assessment/Decision Points (p. 234) for additional information.

**CERTIFICATE IN AQUATICS: INSTRUCTION**

12 credits

(See Certificates (p. 23).)

**CERTIFICATE IN AQUATICS: OPERATIONS**

13 credits

(See Certificates (p. 23).)

**CERTIFICATE IN AQUATICS: SCUBA LEADERSHIP**

12 credits

(See Certificates (p. 23).)

**MILITARY SCIENCE**

LTC Mark South, Chairperson  
bsu.edu/rotc

The Department of Military Science offers qualified undergraduate and graduate students the opportunity to obtain a commission as a second lieutenant in the United States Army and to serve with the Regular Army, Army National Guard, or Army Reserves by successfully completing the Reserve Officers Training Corps Program. Those seeking a commission can qualify to earn a minor in military science at Ball State University. Most books and supplies are provided free by the Department of Military Science. Scholarships, federal and state tuition assistance, university incentives, and other programs provide qualified students with outstanding financial assistance packages, covering virtually all costs for up to four years of college. Military Science offers immersive learning experiences focused on preparing future leaders for the United States Army and managers for the corporate environment. Subjects offered in this program include the study of current military doctrine, Soldier skills, counseling, problem solving, managing resources, military history, and public speaking. During the summer, cadets may choose to learn how to jump out of airplanes (Airborne), conduct Air Assault Operations (Air Assault), travel to foreign countries to study and lead soldiers currently serving in the US Army, and may compete at the national level for scholarships and other incentives. Scholarships for nursing students are also available. For those nursing students who meet the requirements, a guaranteed seat is available in the baccalaureate nursing program. Military science students majoring in nursing also have the opportunity to participate in the Nurse Summer Training Program (NSTP), a three-week clinical elective. This paid elective is conducted at Army hospitals in the United States and Germany. During NSTP, nursing students receive “hands-on” experience under the direct supervision of preceptors, who are Army nurse officers. NSTP provides nursing students a preview of the real world of nursing and an opportunity to develop skills needed for the nursing profession.
MINOR IN MILITARY SCIENCE

21 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MIL 101</td>
<td>Introduction to Military Science</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102</td>
<td>Introduction to Leadership</td>
<td>1</td>
</tr>
<tr>
<td>MIL 201</td>
<td>Leadership/Military Tactics</td>
<td>2</td>
</tr>
<tr>
<td>MIL 202</td>
<td>Leadership/Team Development</td>
<td>2</td>
</tr>
<tr>
<td>MIL 301</td>
<td>Military Leadership and Operations</td>
<td>3 (1)</td>
</tr>
<tr>
<td>MIL 302</td>
<td>Military Leadership and Operations</td>
<td>3</td>
</tr>
<tr>
<td>MIL 401</td>
<td>Leadership Challenges and Goal-Setting</td>
<td>3</td>
</tr>
<tr>
<td>MIL 402</td>
<td>Leadership Challenges and Goal-Setting</td>
<td>3</td>
</tr>
</tbody>
</table>

3 credits from

HIST Approved HIST electives 3

Subtotal: 21

Additional credits may be earned in MIL 299X and MIL 499 (either requires permission of the department chairperson). This minor is open only to those seeking a commission as an officer in the United States Army, Army Reserve, or Army National Guard.

SCHOOL OF NURSING

L. Siktberg, Director

bsu.edu/nursing

Nursing programs are designed to prepare students for careers as professional nurses. Admission to these programs is competitive. Assessments must be completed by all majors in nursing.

General Information

- Admission to Ball State University does not guarantee admission to the baccalaureate nursing program (Bachelor of Science degree with nursing major) in the School of Nursing. The School of Nursing designates the number of students admitted to the baccalaureate nursing program on a term-by-term basis.
- Applicants with a record of substance abuse or conviction of violations of federal, state, or local laws related to controlled substances, alcohol, or other drugs or any offense (misdemeanor or felony) should know they may not be eligible for licensure as a registered nurse.
- Any students with a pending charge for a felony or misdemeanor or in a diversion program or on probation is not permitted in clinical agencies and is not allowed to apply until case-closed documents are provided.
- Criminal background checks are required when admitted to the baccalaureate nursing program and annually thereafter; and students must complete a Semesterly Disclosure of Criminal Background Form.
- Verification of the absence of exclusion from participation in any federal or state program, including Medicare and Medicaid on all nursing students.
- School of Nursing requires the student to sign an informed consent form related to risks and safeguards inherent in the study of clinical nursing, maintain CPR and health requirements, and meets other school and agency requirements.

Admission Requirements

General Applicant Pool

Satisfactory completion of the nursing prerequisites and fulfillment of minimum requirements do not guarantee admission to the baccalaureate nursing major.

Admission Minimum Requirements

- Cumulative undergraduate grade-point average of 3.0 or higher based upon a minimum 30 semester credits completed, based on all undergraduate course work attempted, including nontransfer/transfer credits and repeated courses. Preference will be given to students who matriculated at Ball State University who meet this requirement.
- Credit in ANAT 201, CHEM 101, BIO 113, PSYS 100, and SOC 100 with a grade of C (2.0) or higher and repeated no more than one time. A grade of C- or less is not passing in these courses for the baccalaureate nursing program.
- Credit in NUR 228 and PHYS 215 with a grade of C (2.0) or higher or these courses in progress at the time the application is filed and repeated no more than one time for a grade of C (2.0) or higher on completion.

Admission to the baccalaureate program is competitive. In order to apply, students must have met the prerequisite course requirements. Students must be ranked as a sophomore and will be ranked by:

- Pre-nursing grade-point average (Pre-nursing GPA) based on the following BSU course grades or grades in course equivalents: CHEM 101, BIO 113, ANAT 201, PSYS 100, and SOC 100. (30%). Science courses including Anatomy, Physiology, Biochemistry, and Microbiology must have been complete within the past seven (7) years. If Anatomy, Physiology, Biochemistry, and/or Microbiology course credit is more than 7 years old, the applicant for the nursing program will be required to retake or transfer current course credit.
- Pre-nursing Assessment Score. (35%) Cumulative grade-point average (Cumulative GPA) based on all undergraduate course work attempted,
including nontransfer/transfer credits and repeated courses. (35%)

For other requirements and admission information, contact the School of Nursing.

All applicants must meet the minimal requirements of the general applicant pool.

Degree in 3 Concentration – Students admitted to the university as matriculating freshmen will sign a Degree in 3 contract during freshman orientation. Students take all prerequisite courses in order via the 3-year plan of study.

Partners in Nursing Education (PNE) – Students in the PNE Concentration must meet admission criteria and be approved by the Department of Military Science.

LPN to BS Concentration – Students who are licensed practical nurses (LPNs), with unencumbered Indiana license, will follow the LPN to BS plan of study.

BS Accelerated Second Degree Concentration - Students who have already earned a baccalaureate degree in another major, as verified by an official transcript from a regionally accredited college or university, will follow the 19-month plan of study (fall admissions only). Second Baccalaureate Degree applicants must have a cumulative GPA of 2.75 or higher.

Post-licensure RN to BS Concentration

Minimum Requirements

• Current unencumbered license as a registered nurse.
• Graduation from an accredited National League for Nursing Accrediting Commission (NLNAC) or Accrediting Commission for Education in Nursing (ACEN), or Commission for Nursing Education Accreditation (CNEA) school.

Exception to this criterion:
Grade-point average of 2.75 or better on a 4.0 scale in pre-licensure nursing program or achieve a 2.75 grade-point average or better after the completion of 16 credits at Ball State University.

For other requirements and admission information, contact the School of Nursing.

Progression Policy

• A grade of C (2.0) or higher must be earned in all nursing courses.
• A student who does not pass a clinical nursing course may repeat that course only one time.
• A student who has a SECOND clinical course failure shall not be eligible to earn a Bachelor of Science degree with a major in nursing from Ball State University, and the student is encouraged to make an appointment with the assigned advisor.

An exit assessment must be completed by all majors in the school.

MAJOR IN NURSING (BS)

86-91 CREDITS

C (2.0) or better grade required in: ANAT 201; BIO 113; CHEM 101; COMM 210; EDPS 270; NUTR 340; HSC 180; PHYS 215; PSYS 100; SOC 100.

Support Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIO 113</td>
<td>Microbiology for the Health Sciences</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General, Organic, and Biochemistry for the Health Sciences</td>
<td>5</td>
</tr>
<tr>
<td>COMM 210</td>
<td>Fundamentals of Public Communication</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 270</td>
<td>Human Development Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 340</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HSC 180</td>
<td>Principles of Community Health</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 215</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
</tr>
<tr>
<td>SOC 100</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 382</td>
<td>Applied Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 241</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>NUR 314</td>
<td>Nursing Statistics</td>
<td>3</td>
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</table>

Subtotal: 39

Regular concentration (Pre-Licensure)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NUR 228</td>
<td>Introduction to Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 230</td>
<td>Health Appraisal Across the Lifespan</td>
<td>4</td>
</tr>
<tr>
<td>NUR 231</td>
<td>Fundamental Nursing Skills</td>
<td>4</td>
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<tr>
<td>NUR 322</td>
<td>Research in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 330</td>
<td>Adult Health 1: Nursing Care Across the Adult Lifespan</td>
<td>4</td>
</tr>
<tr>
<td>NUR 340</td>
<td>Adult Health 2: Nursing Care Across the Adult Lifespan</td>
<td>4</td>
</tr>
<tr>
<td>NUR 350</td>
<td>Psychiatric-Mental Health Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NUR 370</td>
<td>Pediatrics</td>
<td>4</td>
</tr>
<tr>
<td>NUR 402</td>
<td>Adult Health 3</td>
<td>4</td>
</tr>
<tr>
<td>NUR 404</td>
<td>Community Health</td>
<td>4</td>
</tr>
<tr>
<td>NUR 406</td>
<td>Nursing of Childbearing Families</td>
<td>4</td>
</tr>
<tr>
<td>NUR 423</td>
<td>Seminar: Transition to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NUR 425</td>
<td>Leadership and Management</td>
<td>4</td>
</tr>
<tr>
<td>NUR 430</td>
<td>Adult Health 4</td>
<td>4</td>
</tr>
</tbody>
</table>
The Department of Nutrition and Health Science offers a variety of programs in allied health science, basic science, health promotion, and disease prevention. Program emphases include dietetics, health education and promotion, school health education (leading to grades 7-12 certification), public health, radiography, and respiratory therapy. The latter two programs are offered in cooperation with IU Health in Indianapolis. Interested students should contact the Department of Nutrition and Health Science or visit https://www.bsu.edu/academics/collegesanddepartments/nutrition-and-health-science/academic-programs to obtain a copy of the desired admission and retention policy and plan of study. In addition, the department houses the national office of Eta Sigma Gamma, the health education honorary.

**Associate Degree**

The Associate degree program prepares students for careers in radiography. Radiographers are highly skilled professionals qualified by education to perform x-ray procedures to assist in diagnosing and treating medical conditions. The prerequisite phase of the program takes place on the Ball State campus. The professional concentration phase is offered in Indianapolis, where medical, technical, and clinical courses are taught at IU Health Methodist Hospital and other clinical education sites. There are specific admission and retention requirements for the radiography program. Interested students should contact the Department of Nutrition and Health Science for more information.

**General Information**

- Students may complete the required radiography prerequisite courses upon admission to the university. Admission to the professional concentration phase requires a separate application and is competitive.
- Admission to the university, satisfactory completion of the radiography prerequisite courses and fulfillment of program admission requirements does not guarantee admission to the professional concentration phase of the program. The radiography program designates the number of students admitted to the professional concentration phase each year.
- Applicants to the professional concentration phase must disclose any termination from a health care facility, ticket, citation, summons, arrest, charge, or conviction for a misdemeanor or felony. Individuals who have been charged or convicted of a misdemeanor or felony must preapply and receive clearance from the national certifying body by the professional concentration program application deadline.
- All accepted students to the professional concentration phase of the program must provide documentation of CPR and required immunization/tests and successfully complete a background check and mandatory drug testing performed by IU Health.
- In order to participate in the professional concentration phase of the program, no accepted student may appear on specific Federal exclusion lists.

**Bachelor’s Degrees**

Two of the bachelor degree programs prepare students for careers as health educators. The major in health education and promotion prepares students to serve as health educators in community health settings that include, but are not limited to, governmental health agencies, community health agencies, clinical health settings, and in businesses and industries. In addition to the course work required in this major, students must also complete a semester-long internship.

The teaching major in health and physical education prepares students to serve as health and physical educators in middle and high school settings. In addition to the course work required in the major, students must complete the professional education course sequence and teacher education requirements, including a student teaching experience.

The third bachelor degree program prepares students for careers in respiratory therapy. Respiratory therapists help diagnose, treat, rehabilitate, and educate to prevent and manage cardiopulmonary diseases. They are skilled in airway maintenance, procurement and analysis of arterial blood gas samples, and performance of pulmonary function tests. Students may enter the general studies portion of the program upon admission to the university; however, admission to the program is competitive, and admission to the university does not guarantee acceptance to the professional studies/clinical phase of the program. The professional studies courses are taught at IU Health in Indianapolis. Students may apply for admission to the professional studies/clinical portion of this program when
the following requirements are met: 28 credits of the required courses are completed; 10 of these completed credits are in the required math/science courses; all math/science courses must be completed with a grade of C or higher; 2.5 overall GPA; completion and documentation of at least three credits of clinical observation. Accepted students must provide documentation of CPR and required immunizations/tests. Once accepted, each must successfully complete a background check and mandatory drug testing performed by IU Health. Accepted students must not appear on specific Federal exclusion lists. Failing any of these requirements would make the applicant ineligible for the professional studies portion of the program.

Dietetics/Pre-Dietetics (four-year program). The Didactic Program in Dietetics prepares students for careers that maximize health through nutrition. The program provides academic preparation for a career as a Registered Dietitian Nutritionist (RDN). An RDN provides nutrition care in many settings, such as medical centers, community health programs, schools, athletic teams, and may also work in the foodservice or pharmaceutical industries. The program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. Graduates of the program are required to complete an ACEND-accredited Dietetic Internship post-graduation, and prior to the Registration Examination for Dietitians.

Associate Degree

ASSOCIATE IN SCIENCE—RADIOGRAPHY (AS)

60 CREDITS

Admission Requirements
In order to apply for admission to the professional concentration phase of the Radiography Program, students must:

• Meet with the Nutrition and Health Science Primary Departmental Advisor.

• Be a current Ball State student by December 1 of the year immediately prior to the professional concentration phase application deadline. All transfer credits must be evaluated and appear on the BSU Student DegreeWorks record and official BSU transcript.

• Successfully complete 12 of the 24 credits of radiography prerequisite courses.

• Earn a minimum of 2.5 overall GPA from the required radiography prerequisite courses.

• Disclose any termination from a healthcare facility, ticket, citation, summons, arrest, charge, or conviction for a misdemeanor or felony. Individuals who have been charged or convicted of a misdemeanor or felony must preapply and receive clearance from the national certifying body by the professional concentration program application deadline.

• Meet the following requirements of the math/science courses ANAT 201, CHEM 100, MATH 125, PHYC 100, PHYS 215:

1. Complete 3 of the 5.

2. Complete within the past seven years or must be retaken.

3. Not repeat any math/science course more than one time.

4. Earn a grade of C or higher for all 5 math/science courses.

• Earn a grade of C or higher for English (ENG 103).

• Have read the most current Radiography Program Policies, Procedures, and Information and Radiography Check Sheet documents posted on the BSU website.

• Be a minimum of 18 years of age by the first day of the professional concentration phase of the program due to occupational radiation exposure limits of minors and to meet legal clinical education setting policies.

Retention Requirements
In order to maintain admission and participate in the professional concentration phase of the Radiography Program, students must:

• Successfully complete all 24 credits of the radiography prerequisite courses by the end of spring semester prior to beginning the professional concentration phase.

• Earn a grade of C or higher in all professional concentration courses.

Prerequisite courses, 24 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>People and Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>COMM 210</td>
<td>Fundamentals of Public Communication</td>
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</tr>
<tr>
<td>ENG 103</td>
<td>Rhetoric and Writing</td>
<td>3</td>
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<td>MATH 125</td>
<td>Quantitative Reasoning</td>
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<tr>
<td>PHYC 100</td>
<td>Conceptual Physics</td>
<td>3</td>
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<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
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Subtotal: 24

Professional concentration courses, 36 credits

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<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AHSC 201</td>
<td>Introduction to Medical Imaging and Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>AHSC 224</td>
<td>Radiographic Procedures 1</td>
<td>3</td>
</tr>
<tr>
<td>AHSC 225</td>
<td>Radiographic Procedures 2</td>
<td>4</td>
</tr>
</tbody>
</table>
Subtotal: 36

Subtotal: 60

Students qualifying for exemption from ENG 103 will receive credit for the course. ENG 101 and ENG 102 may be substituted for ENG 103.

Baccalaureate Degrees

Students will be guided by the outline of baccalaureate degrees (p. 20), the University Core Curriculum (p. 26), and the concentration areas listed below.

MAJOR IN DIETETICS (BA/BS)

96 CREDITS

The Department of Nutrition and Health Science offers a baccalaureate degree in dietetics that is fully accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for required chemistry courses (two years of high school algebra or successful completion of MATH 108). Students pursuing a baccalaureate degree in dietetics must begin their academic career as a pre-dietetics major. Students will apply into the dietetics major in the spring semester of the second year, or as required courses are completed. Please refer to the Dietetics Program Director for full program requirements and program admission criteria.

Pre-dietetics core, 34 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
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<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
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<tr>
<td>CHEM 230</td>
<td>Organic Chemistry for the Life Sciences</td>
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<tr>
<td>CHEM 241</td>
<td>Organic Chemistry Laboratory 1: Fundamental Techniques</td>
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<td>CHEM 360</td>
<td>Essentials of Biochemistry</td>
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<td>Introductory Biochemistry</td>
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<td>Principles of Food Preparation and Food Science</td>
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<td>HOSP 147</td>
<td>Foodservice Sanitation</td>
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<tr>
<td>HOSP 220</td>
<td>Meal Design and Presentation</td>
<td>3</td>
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<tr>
<td>NUR 101</td>
<td>Terminology for Health Care Professionals and Consumers</td>
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<tr>
<td>NUTR 345</td>
<td>Macronutrients</td>
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<tr>
<td>NUTR 346</td>
<td>Micronutrients and Phytochemicals</td>
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<td>NUTR 363</td>
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<td>Professional Leadership in Nutrition and Dietetics</td>
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<tr>
<td>NUTR 375</td>
<td>Nutrition Assessment, Counseling, and Education</td>
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<td>NUTR 425</td>
<td>Nutrition Counseling Practicum</td>
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<td>NUTR 435</td>
<td>Introduction to Research in Nutrition and Dietetics</td>
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<tr>
<td>NUTR 446</td>
<td>Medical Nutrition Therapy 1</td>
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<td>NUTR 447</td>
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<tr>
<td>NUTR 456</td>
<td>Community Nutrition</td>
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<td>NUTR 480</td>
<td>Global Nutrition</td>
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<tr>
<td>PHIL 202</td>
<td>Ethics</td>
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<td>Statistics</td>
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Subtotal: 34

Dietetics courses, 62 credits

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<tr>
<th>Course</th>
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<tr>
<td>BIO 113</td>
<td>Microbiology for the Health Sciences</td>
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<td>HOSP 147</td>
<td>Foodservice Sanitation</td>
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<tr>
<td>HOSP 220</td>
<td>Meal Design and Presentation</td>
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<tr>
<td>NUR 101</td>
<td>Terminology for Health Care Professionals and Consumers</td>
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<td>Macronutrients</td>
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<td>NUTR 365</td>
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<td>Nutrition Counseling Practicum</td>
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<td>PSYS 241</td>
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Subtotal: 62

Subtotal: 96

MAJOR IN HEALTH EDUCATION AND PROMOTION (BA/BS)
### 72 CREDITS

#### Required Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
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<td>HSC 160</td>
<td>Fundamentals of Human Health</td>
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<tr>
<td>HSC 180</td>
<td>Principles of Community Health</td>
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<td>HSC 200</td>
<td>Introduction to Health Education and Promotion</td>
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<td>HSC 210</td>
<td>Health Behavior Theories</td>
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<td>HSC 220</td>
<td>Population, Race, and Culture in Health Promotion</td>
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<tr>
<td>HSC 301</td>
<td>Program Planning in Health Promotion 1</td>
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<td>HSC 302</td>
<td>Program Planning in Health Promotion 2</td>
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<td>Healthcare Systems</td>
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<td>Disease Management in Health Promotion</td>
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<td>HSC 387</td>
<td>Quantitative Methods and Epidemiology in Health Promotion</td>
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<tr>
<td>HSC 388</td>
<td>Organization and Administration in Health Promotion</td>
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<td>HSC 479</td>
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<td>HSC 482</td>
<td>Environmental Health</td>
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<td>HSC 487</td>
<td>Applied Research, Writing, and Evaluation in Health Promotion</td>
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<tr>
<td>HSC 494</td>
<td>Health Communication</td>
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<td>Professional Preparation in Health Promotion</td>
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<td>Principles of Human Nutrition</td>
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<tr>
<td>PHYS 205</td>
<td>Fundamentals of Human Physiology</td>
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#### Subtotal: 3 credits from

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<td>EXSC 302</td>
<td>Physical Activity Throughout the Lifespan</td>
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<tr>
<td>GER 440</td>
<td>Women and Aging</td>
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<tr>
<td>HSC 365</td>
<td>Health and Aging</td>
<td>3</td>
</tr>
<tr>
<td>HSC 372</td>
<td>Women and Health</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 360</td>
<td>Nutrition and Cardiometabolic Disease</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 448</td>
<td>Nutrition and Weight Management</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
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<tr>
<td>SOC 341</td>
<td>Sociology of Health and Illness</td>
<td>3</td>
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<tr>
<td>WWIN 201</td>
<td>Improving Worker Wellbeing: A Multidisciplinary Approach</td>
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#### Subtotal: 3

### 3 credits from

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<td>CPSY 470</td>
<td>Introduction to Cross-Cultural Counseling</td>
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<tr>
<td>HOSP 395</td>
<td>Food and Culture</td>
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<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
</tr>
<tr>
<td>SOC 320</td>
<td>Social Inequality</td>
<td>3</td>
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<tr>
<td>SOC 328</td>
<td>Globalization and the Social World</td>
<td>3</td>
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<tr>
<td>SOC 434</td>
<td>Sociology of Human Sexuality</td>
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<tr>
<td>WGS 220</td>
<td>International Women's Issues</td>
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#### Subtotal: 3

### 3 credits from

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<tbody>
<tr>
<td>COMM 320</td>
<td>Persuasion</td>
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<tr>
<td>COMM 335</td>
<td>Communication and Health</td>
<td>3</td>
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<tr>
<td>CPSY 420</td>
<td>Techniques of Psychological Interventions</td>
<td>3</td>
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<td>EMHS 350</td>
<td>Hazardous Materials Health and Safety</td>
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<td>EMHS 351</td>
<td>Introduction to Emergency Management and Homeland Security</td>
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<tr>
<td>HSC 295</td>
<td>Reading, Technology, and Instructional Strategies in School Health</td>
<td>3</td>
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<td>HSC 350</td>
<td>Elementary School Health Program</td>
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<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
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<tr>
<td>MKG 375</td>
<td>Social Media Marketing</td>
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<td>WWIN 310</td>
<td>Workplace Wellness Administration</td>
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<tr>
<td>WWIN 405</td>
<td>Workplace Wellness Coaching</td>
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#### Subtotal: 3

### 3 credits from

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<th>Course Title</th>
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<tr>
<td>CPSY 400</td>
<td>Fundamentals of Counseling</td>
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<tr>
<td>EDPS 351</td>
<td>Adolescent Psychology</td>
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<td>EDPS 355</td>
<td>Adult Psychology</td>
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<tr>
<td>HSC 367</td>
<td>Drug Dependency and Abuse</td>
<td>3</td>
</tr>
<tr>
<td>HSC 371</td>
<td>Death and Dying</td>
<td>3</td>
</tr>
<tr>
<td>HSC 381</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 301</td>
<td>Health Psychology</td>
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#### Subtotal: 3

**Subtotal:** 72

Students are responsible for all elective courses.
MAJOR IN RESPIRATORY THERAPY (BS)

107 CREDITS

Admission and retention requirements

• Completion of 28 credits of course work.
• 10 of the 28 credits of course work must be in math/science courses required for the program.
• Grade of C or better in the required math/science courses.
• Minimum overall grade-point average of 2.5.
• Minimum grade of C in each professional course.
• Program graduates must pass a series of three national examinations, the first of which is also required for licensure as a Respiratory Care Practitioner in Indiana.
• All prerequisite course work must be completed by August 1 if a student is admitted into the clinical phase of the program.
• A student who has been dismissed from the program may not apply for readmission. Under special circumstances, a waiver may be requested by the program faculty and forwarded to the department chairperson for action.

Foundation courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 101</td>
<td>General, Organic, and Biochemistry for the Health Sciences</td>
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<tr>
<td>HSC 160</td>
<td>Fundamentals of Human Health</td>
<td>3</td>
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<td>PHIL 202</td>
<td>Ethics</td>
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<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
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<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
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Subtotal: 18

Required prerequisites

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<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
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<tr>
<td>BIO 113</td>
<td>Microbiology for the Health Sciences</td>
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<tr>
<td>MATH 111</td>
<td>Pre-Calculus Algebra</td>
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<td>Human Physiology</td>
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<td>PSYS 241</td>
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Subtotal: 19

Required AHSC courses, 70 credits

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<tbody>
<tr>
<td>AHSC 303</td>
<td>Introduction to Human Diseases for Respiratory Therapists</td>
<td>2</td>
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<tr>
<td>AHSC 311</td>
<td>Cardiorespiratory Physiology</td>
<td>3</td>
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<td>AHSC 315</td>
<td>Cardiorespiratory Assessment and Patient Care</td>
<td>3</td>
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<td>AHSC 325</td>
<td>General Respiratory Care</td>
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<td>AHSC 326</td>
<td>Respiratory Care Techniques 1</td>
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<td>AHSC 333</td>
<td>Cardiorespiratory Pharmacology 1</td>
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<td>AHSC 350</td>
<td>Cardiorespiratory Diseases</td>
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<td>AHSC 355</td>
<td>Life Support</td>
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<td>AHSC 356</td>
<td>Respiratory Care Techniques 2</td>
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<td>AHSC 371</td>
<td>Pulmonary Diagnostics</td>
<td>3</td>
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<td>AHSC 385</td>
<td>Respiratory Care Practicum 1</td>
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<td>AHSC 395</td>
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<td>AHSC 405</td>
<td>Neonatal - Pediatric Respiratory Care</td>
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<td>AHSC 420</td>
<td>Introduction to Research in Respiratory Care</td>
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<td>Management and Leadership for Respiratory Care</td>
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<td>AHSC 440</td>
<td>Advanced Cardiac Life Support</td>
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<td>Cardiorespiratory Pharmacology 2</td>
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<td>Seminar in Cardiorespiratory Care</td>
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<td>AHSC 451</td>
<td>Cardiorespiratory Monitoring and Special Techniques</td>
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<td>AHSC 461</td>
<td>Pulmonary Rehabilitation and Geriatrics</td>
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<td>Patient Education Techniques for Respiratory Therapists</td>
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<td>AHSC 485</td>
<td>Respiratory Care Practicum 4</td>
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Subtotal: 70

MINOR IN PUBLIC HEALTH

18 CREDITS

Minor is not available to students pursuing a major in health education and promotion.

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HSC 180</td>
<td>Principles of Community Health</td>
<td>3</td>
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<td>HSC 200</td>
<td>Introduction to Health Education and Promotion</td>
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<td>HSC 310</td>
<td>Healthcare Systems</td>
<td>3</td>
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<tr>
<td>HSC 387</td>
<td>Quantitative Methods and Epidemiology in Health Promotion</td>
<td>3</td>
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<tr>
<td>HSC 482</td>
<td>Environmental Health</td>
<td>3</td>
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<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
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<td>HSC 344</td>
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<td>3</td>
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<tr>
<td>HSC 365</td>
<td>Health and Aging</td>
<td>3</td>
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<tr>
<td>HSC 367</td>
<td>Drug Dependency and Abuse</td>
<td>3</td>
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</table>
HSC 368  Consumer Health Issues  3  • Satisfactorily complete second level of portfolio review.
HSC 371  Death and Dying  3
HSC 372  Women and Health  3
HSC 381  Stress Management  3
HSC 462  Health Promotion in the Worksite  3
HSC 464  Health Education in the Clinical Setting  3

Students are responsible for course prerequisites for all elective courses.

Pre-Physical Therapy
Courses are offered that fulfill requirements for those students who are planning to apply for admission to physical therapy schools. Preprofessional counseling for this program is available in the School of Kinesiology.

Teacher Education
Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for the descriptions of these courses and other professional requirements of the teacher education program.

HEALTH AND PHYSICAL EDUCATION TEACHER EDUCATION — DECISION POINT REQUIREMENTS

Decision Point 1:
• PEP 161 – satisfactory dispositions; C or better.
• HSC 160 – C or better.
• Creation of on-line portfolio.
• Fitness Test – associated with Fitness/Activity (PEP 161).
• Demonstrate adequate swim skills or take AQUA 214/AQUA 215.

Decision Point 2:
• CASA passed.
• Overall GPA of 3.0 in at least 45 credits.
• GPA of 2.75 in major.
• HSC 290 – satisfactory dispositions; C or better.
• PEP 209, PEP 227, PEP 291 satisfactory dispositions; C or better.
• Fitness Test – associated with Fitness/Activity (PEP 252).
• C or better in 100/200-level professional education courses (EDMU 205 and EDPS 250).
• C or better in COMM 210.
• Approval of application for admission in teaching curriculum.
• Declaration of teaching major via Degree Works.

Decision Point 3:
• Overall GPA of 3.0 in at least 93 credits.
• GPA of 3.0 in major.
• Completion of Writing Proficiency Program.
• Within 9 credits of completion of content courses.
• Satisfactorily complete third level of portfolio review.
• Meet fitness testing requirements (PEP 399).
• Portfolio – plan, delivery, reflection, and leadership potential.
• HSC 295, HSC 363, HSC 395 – satisfactory dispositions; C or better.
• HSC 261, HSC 367, and NUTR 240 – C or better.
• PEP 310, PEP 394, PEP 399, PEP 400 satisfactory dispositions; C or better.
• Lesson plan (HSC 295, PEP 394/PEP 399).
• Assessment (PEP 310).
• Evidence of CPR certification.

Decision Point 4 (after student teaching):
• Satisfactorily complete student teaching portfolio review.
• Overall GPA of 3.0.
• GPA of 3.0 in major.
• Complete all degree requirements.
• Current state licensure testing requirements (content and pedagogy).
• Exit interview/survey.

Approval from student teaching supervisor and University supervisor for graduation.

TEACHING MAJOR IN HEALTH AND PHYSICAL EDUCATION (BA/BS)

92 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EXSC 292</td>
<td>Anatomy</td>
<td>3</td>
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<tr>
<td>EXSC 293</td>
<td>Foundations of Physiology and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSC 160</td>
<td>Fundamentals of Human Health</td>
<td>3</td>
</tr>
<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
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<tr>
<td>HSC 290</td>
<td>Evaluation and Assessment in Health and Physical Education</td>
<td>3</td>
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<tr>
<td>HSC 295</td>
<td>Reading, Technology, and Instructional Strategies in School Health</td>
<td>3</td>
</tr>
<tr>
<td>HSC 363</td>
<td>Current Issues in Administration and Coordination of Health and Physical Education</td>
<td>3</td>
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<tr>
<td>HSC 367</td>
<td>Drug Dependency and Abuse</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<td>------------</td>
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</tr>
<tr>
<td>HSC 395</td>
<td>Methods, Materials, and Curriculum for Teaching Health Education</td>
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<tr>
<td>NUTR 240</td>
<td>Nutrition for Educators</td>
<td>3</td>
</tr>
<tr>
<td>PEP 158</td>
<td>Teaching Dance and Gymnastics</td>
<td>2</td>
</tr>
<tr>
<td>PEP 161</td>
<td>Foundations and Principles of Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PEP 209</td>
<td>Introduction to Teaching Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PEP 222</td>
<td>Teaching Field and Court Invasion Games</td>
<td>2</td>
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<tr>
<td>PEP 227</td>
<td>Introduction to Adapted Physical Education/Activity</td>
<td>3</td>
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<tr>
<td>PEP 232</td>
<td>Teaching Net and Wall Games</td>
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<tr>
<td>PEP 252</td>
<td>Teaching Physical Fitness and Fitness Activities</td>
<td>3</td>
</tr>
<tr>
<td>PEP 291</td>
<td>Motor Development and Learning Across the Lifespan</td>
<td>3</td>
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<tr>
<td>PEP 310</td>
<td>Formal Assessment in Health, Physical Education, and Physical Activity Settings</td>
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<tr>
<td>PEP 394</td>
<td>Teaching Physical Education in the Elementary School</td>
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<tr>
<td>PEP 399</td>
<td>Teaching Physical Education in the High School</td>
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<tr>
<td>PEP 400</td>
<td>Introduction to Curriculum Design in Physical Education</td>
<td>2</td>
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<tr>
<td>PEP 444</td>
<td>Developing the Health and Physical Education Classroom Environment</td>
<td>3</td>
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</tbody>
</table>

**Subtotal: 65**

Demonstrates competent swimming skills or takes AQUA 214 or AQUA 215. Demonstrates CPR and first aid certification.

### ALL-GRADE EDUCATION PROGRAM

Professional education sequence, 27 credits

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDAL 470</td>
<td>Student Teaching: All-Grade</td>
<td>6 TO 7</td>
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<tr>
<td>EDTO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 250</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 390</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDJH 385</td>
<td>Principles of Teaching in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 465</td>
<td>Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade</td>
<td>3 OR 5</td>
</tr>
</tbody>
</table>

**Subtotal: 27**

See Professional Education Assessment/Decision Points (p. 234) for additional information.

### SOCIAL WORK

G. Stone, Chairperson
bsu.edu/socwk

Accredited by the Council on Social Work Education, the Bachelor of Social Work (BSW) program is committed to enhancing the quality of life of people by educating students for beginning professional employment in social services and for graduate education. Bachelor of Social Work students complete a challenging campus and community-based academic program that requires the mastery of professional practice competencies needed to shape solutions for social problems by strengthening opportunities, resources, and capacities of people, and by promoting just social and economic policies and services.

All SOCW courses at the 300- and 400-level must be completed at Ball State University. Transfer credits are limited to 100- and 200-level courses, and only 12 credits of social work will be considered for transfer. Exceptions may be made for students transferring from accredited social work programs. These students should meet with the department chairperson to discuss their individual course requests. The department chairperson will then make the final decision on the transferability of the course work.

### MAJOR IN SOCIAL WORK (BSW)

69 CREDITS

#### Admission and Retention Requirements

**Formal Admission to the Social Work Major**

1. While a student can declare social work as their major at any time, to complete the BSW degree a student must be formally admitted to the major through a selective process following the procedures listed below and meeting the requirements for admission.

Admission procedures and requirements include:

- completing an approved volunteer assignment of a minimum of twenty-five clock hours (course requirement in SOCW 200) and submitting a performance evaluation to the department;
- obtaining at least two Social Work faculty references;
- having earned a minimum grade-point average of 2.5 on a 4.0 scale, in 100- and 200-level required social work courses for the major;
- submitting a completed admission application to the department prior to the Fall and Spring due dates;
- completing the admission committee review process;
• declaring any criminal convictions.

2. Students denied admission to or continuation in the major may appeal the decision within fourteen calendar days. Appeals are made by informing the department chairperson in writing that the decision to deny admission or continuation in the major is being appealed by specifying the basis of the appeal. The department chairperson will convene the social work faculty within fourteen calendar days of notification of the appeal to review all information obtained for the admissions interviews, faculty advising conferences, and academic records. The BSW Student of Concern Committee will meet with the student within fourteen calendar days. The BSW Student of Concern Committee has the authority to admit or retain the student in the major. Students denied formal admission to or retention in the major will be advised of alternative options.

**Retention in the Social Work Major**

To enroll in the senior-level required social work courses (SOCW 410, SOCW 430, SOCW 440, SOCW 460, and SOCW 462) students must have:
- earned and maintained a cumulative minimum grade-point average of 2.5 in required social work courses and required nonsocial work courses;
- earned a grade of C or better in SOCW 325;
- successfully completed MATH 125 or equivalent prior to enrolling in SOCW 440.

To enroll in social work practicum courses (SOCW 460 and SOCW 462) students must have:
- submitted a practicum application and resume to the Practicum Coordinator;
- earned a minimum grade-point average of 2.5 in all required courses for the social work major;
- earned grades of C or better in SOCW 410, SOCW 430, SOCW 440;
- to successfully complete the BSW degree program, students must have earned a grade of C or better in SOCW 460 and SOCW 462.

**Minimum number of required courses for the major at Ball State University**

- Transfer students from other accredited BSW programs must take a minimum of 18 semester credits within the department including SOCW 410, SOCW 460, and SOCW 462 (18 credits) in order to complete the BSW degree at Ball State.
- Transfer students who have not taken a separate group practice course will also be required to take SOCW 310.
- Transfer students must meet the department’s grade-point average requirements for the major and for the 400-level courses.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOCW 100</td>
<td>Introduction to Social Work</td>
<td>3</td>
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<tr>
<td>SOCW 200</td>
<td>Social Work Practice 1 with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 220</td>
<td>Social Welfare Policy 1</td>
<td>3</td>
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<tr>
<td>SOCW 250</td>
<td>Human Behavior and the Social Environment 1</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 310</td>
<td>Social Work Practice 2</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 320</td>
<td>Social Welfare Policy and Programs 2</td>
<td>3</td>
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<tr>
<td>SOCW 325</td>
<td>Human Behavior and the Social Environment 2</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 340</td>
<td>Research in Social Work 1</td>
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<tr>
<td>SOCW 410</td>
<td>Social Work Practice 3</td>
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</tr>
<tr>
<td>SOCW 430</td>
<td>Social Work Practice 4 with Field Experience</td>
<td>3</td>
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<tr>
<td>SOCW 440</td>
<td>Research in Social Work 2</td>
<td>3</td>
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<tr>
<td>SOCW 460</td>
<td>Social Work Practicum</td>
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<td>SOCW 462</td>
<td>Social Work Practicum Seminar</td>
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<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
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<td>PSYS 367</td>
<td>Introduction to Neuroscience</td>
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<td>BIO 254</td>
<td>Biology in the Social Context</td>
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<td>SOC 100</td>
<td>Principles of Sociology</td>
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<td>SOC 242</td>
<td>Social Problems</td>
<td>3</td>
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<tr>
<td>ANTH 311</td>
<td>Ethnicity and Race</td>
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<tr>
<td>COMM 290</td>
<td>Intercultural Communication</td>
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<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>SOC 421</td>
<td>Racial and Cultural Minorities in the United States</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 241</td>
<td>Gender, Sex, and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
</tbody>
</table>
SOCW 370 Selected Aspects of Social Work Practice 3 TO 6
or
Advisor approved 300- or 400-level university course(s) in a related discipline. A total of 6 credits required of the major.

Subtotal: 69

MINOR IN SOCIAL WORK
18 CREDITS
Required Courses
SOCW 100 Introduction to Social Work 3
SOCW 200 Social Work Practice 1 with Field Experience 3
SOCW 220 Social Welfare Policy 1 3
SOCW 250 Human Behavior and the Social Environment 1 3
SOCW 325 Human Behavior and the Social Environment 2 3
3 credits from elective (approved 300- or 400-level university course) 3

Subtotal: 18

SPEECH PATHOLOGY AND AUDIOLOGY
M. J. German, Chairperson
bsu.edu/spaa
Speech-language pathologists provide diagnostic services and therapy to people with speech or language problems. Audiologists provide diagnostic and rehabilitative services to people with hearing and balance problems. Speech-language pathologists and audiologists work in medical settings, schools, private practice, community and university clinics, long-term care facilities, and industrial settings.

The Department of Speech Pathology and Audiology's graduate programs are accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA). To become licensed, certified speech-language pathologists, students must complete both a bachelor's degree and a master's degree. To become licensed, certified audiologists, students must complete both a bachelor's degree and a doctorate degree. As part of their work, students acquire extensive clinical practicum experience working with patients who have speech, language, and hearing problems.

At the undergraduate level, the department offers preprofessional undergraduate majors in speech-language pathology and preaudiology. The majors, combined with an appropriate graduate program, lead to a state professional license, national certification, and school licensure. Admission to the clinical portion of the major is selective. Students should obtain a copy of the department's "Undergraduate Major Admission and Progression Policies" from the department office, Arts and Communications Building, Room 104. For information on the department's Master of Arts (MA) in Speech-Language Pathology and Doctor of Audiology (AuD) degree, see the Ball State University Graduate Catalog.

The department operates the Ball State University Speech-Language Pathology and Audiology Clinics as campus facilities where students can participate in their initial practicum experiences under the supervision of the department's faculty.

MAJOR IN PREAUDIOLOGY (BA/BS)
65-66 CREDITS
Admission requirements
- Completion of the major in preaudiology preparation does not guarantee admission to any Ball State post-baccalaureate program in audiology, nor to other graduate or professional audiology programs. Admission to such programs is usually competitive and typically requires submission of standardized test scores.
- Although most students entering AuD programs will have completed a four-year undergraduate program, those with outstanding qualifications may be admitted after only three years. Students who have completed the undergraduate preaudiology preparation major requirements and who have been admitted to an AuD program may be able to use the credit earned in their first year of AuD professional courses to meet the senior-year course requirements for the baccalaureate degree from Ball State.
- To enroll in SPAA 343 a student must apply and hold an overall GPA of 3.25 or better and have completed at least 30 semester credits. A student must also hold a GPA of 3.25 or better in SPAA courses and have completed at least 8 semester credits of SPAA courses. Students wishing to enroll in SPAA 343 should complete a permission request form and turn the form into the SPAA office by the end of the third week of the semester prior to the desired enrollment in SPAA 343.
To enroll in SPAA 345 a student must hold an overall GPA of 3.25 or better and have completed at least 33 semester credits. A student must also hold a GPA of 3.25 or better in SPAA courses and have completed at least 11 semester credits of SPAA courses.

A complete Admission and Progress Policies document can be obtained from the SPAA Office (AC 104).

### Required Courses

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology I</td>
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<tr>
<td>CHEM 101</td>
<td>General, Organic, and Biochemistry for the Health Sciences</td>
<td>5</td>
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<tr>
<td>HSC 250</td>
<td>Emergency Health Care</td>
<td>3</td>
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<tr>
<td>MATH 125</td>
<td>Quantitative Reasoning</td>
<td>3</td>
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<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 241</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 100</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 100</td>
<td>Survey of Speech-Language Pathology and Audiology</td>
<td>2</td>
</tr>
<tr>
<td>SPAA 101</td>
<td>Clinical Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 260</td>
<td>Speech Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 270</td>
<td>Language Development</td>
<td>3</td>
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<tr>
<td>SPAA 343</td>
<td>Introduction to Audiology</td>
<td>3</td>
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<tr>
<td>SPAA 344</td>
<td>Aural Rehabilitation</td>
<td>3</td>
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<tr>
<td>SPAA 345</td>
<td>Clinical Audiology: Orientation and Visitation</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 100</td>
<td>Conceptual Physics</td>
<td>3</td>
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<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
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<tr>
<td>ISOM 125</td>
<td>Introduction to Business with Integrated Computer Applications</td>
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**Subtotal: 3-4**

6 credits from

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<td>ENG 320</td>
<td>Introduction to Linguistic Science</td>
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<tr>
<td>ECYF 265</td>
<td>Infant/Toddler Development and Education</td>
<td>3</td>
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<tr>
<td>ECYF 275</td>
<td>Child Development</td>
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<tr>
<td>PSYS 100</td>
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**Subtotal: 3**

3 credits from

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<td>SPCE 240</td>
<td>Introduction to Sign Systems, Educational Environments, and Services</td>
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<tr>
<td>SNLN 251</td>
<td>American Sign Language 1</td>
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**Subtotal: 3**

3-4 credits from

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<td>PHYC 100</td>
<td>Conceptual Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 205</td>
<td>Fundamentals of Human Physiology</td>
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</tbody>
</table>

**Subtotal: 6**

62 CREDITS

**Admission requirements**

- Admission to the clinical portion (SPAA 311 and SPAA 312) of this major is restrictive and selective. To enroll in SPAA 311 and SPAA 312 a student must apply and hold an overall GPA of 3.5 or better and have completed at least 30 semester credits. A student must also hold a GPA of 3.5 or higher in SPAA courses and have completed at least 8 semester credits of SPAA courses. Students wishing to enroll in SPAA 311 and SPAA 312 should complete a permission request form. The form should be turned into the SPAA office by the end of the third week of the semester prior to the desired enrollment in SPAA 311 and SPAA 312.

- To enroll in SPAA 419 students must have an overall GPA of 3.5 or better and have completed at least 33 semester credits. Students must also have a GPA of 3.5 or better in SPAA classes and have completed at least 18 semester credits of SPAA courses and have received a grade of C or better in SPAA 311 and SPAA 312 (or in a similar course from another university approved by the SPAA department chairperson).

- A complete Admission and Progress policies document can be obtained from the SPAA office (AC 104).

### Required Courses

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<td>CS 104</td>
<td>Introduction to Computers</td>
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<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
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<tr>
<td>SPAA 161</td>
<td>Anatomy and Physiology of Speech and Hearing</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 205</td>
<td>Fundamentals of Human Physiology</td>
<td>3</td>
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<tr>
<td>CS 104</td>
<td>Introduction to Computers</td>
<td>3</td>
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<tr>
<td>ENG 320</td>
<td>Introduction to Linguistic Science</td>
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<tr>
<td>ECYF 265</td>
<td>Infant/Toddler Development and Education</td>
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<tr>
<td>ECYF 275</td>
<td>Child Development</td>
<td>3</td>
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<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
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Subtotal: 66
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>PSYS 241</td>
<td>Statistics</td>
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</tr>
<tr>
<td>PSYS 371</td>
<td>Applied Behavior Analysis</td>
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<td>SPAA 100</td>
<td>Survey of Speech-Language Pathology and Audiology</td>
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<tr>
<td>SPAA 101</td>
<td>Clinical Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 161</td>
<td>Anatomy and Physiology of Speech and Hearing</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 210</td>
<td>Speech Sound Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 260</td>
<td>Speech Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 270</td>
<td>Language Development</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 311</td>
<td>Clinical Procedures and Observations</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 312</td>
<td>Introduction to Diagnosis and Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 343</td>
<td>Introduction to Audiology</td>
<td>3</td>
</tr>
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<td>SPAA 344</td>
<td>Aural Rehabilitation</td>
<td>3</td>
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<tr>
<td>SPAA 361</td>
<td>Neuroanatomy and Neurophysiology of Speech, Language, and Hearing</td>
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<td>SPAA 371</td>
<td>Child Language Disorders 1</td>
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<tr>
<td>SPAA 418</td>
<td>Neurogenic and Organic Speech and Language Disorders</td>
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<td>SPAA 419</td>
<td>Clinical Practicum</td>
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<tr>
<td>SPCE 201</td>
<td>Introduction to Students With Exceptional Needs</td>
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Subtotal: 62

**MINOR IN SPEECH PATHOLOGY AND AUDIOLOGY**

**24 CREDITS**

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>SPAA 100</td>
<td>Survey of Speech-Language Pathology and Audiology</td>
<td>2</td>
</tr>
<tr>
<td>SPAA 101</td>
<td>Clinical Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 161</td>
<td>Anatomy and Physiology of Speech and Hearing</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 210</td>
<td>Speech Sound Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 260</td>
<td>Speech Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 270</td>
<td>Language Development</td>
<td>3</td>
</tr>
<tr>
<td>SPAA 343</td>
<td>Introduction to Audiology</td>
<td>3</td>
</tr>
</tbody>
</table>

4 credits from electives in SPAA

Subtotal: 24
Honors College

J. Emert, Dean; A. Livingston, Associate Dean
bsu.edu/honors

The Honors College offers distinctive learning opportunities for students with excellent academic promise by way of special courses, colloquia, seminars, and independent study. The curriculum is interdisciplinary in nature, consisting of courses that link issues and themes from a variety of modes of inquiry. Honors professors often invite guest speakers to furnish additional perspectives on topics under study.

Students in the Honors College complete a core of six Honors courses that can also meet requirements in the University Core Curriculum. The core includes inquiries in contemporary American civilization, global studies, science, and a three-term integrated exploration of the major intellectual, artistic, and cultural achievements of humankind. Honors core courses may be taken during any year of study.

All incoming students enroll in the Freshman Seminar in their first semester. This seminar provides an orientation to the Honors College and the university experience, and is guided by an upper-division Honors College student mentor. After the freshman year, students may enroll in Honors colloquia. Each Honors student takes at least two colloquia during their undergraduate studies. These colloquia are developed by Honors faculty members to focus on special topics, creative connections, or critical issues in their areas of expertise. As a senior, each student completes an individual inquiry or creative project under the guidance of a professor selected by the student. Throughout their four years, Honors students have ready access to their Honors advisor, who helps to identify one’s academic goals and offers continual guidance from freshman orientation through graduation. Honors students may apply for the Undergraduate Fellows competition, which awards stipends for independent work with a faculty mentor. Honors students are strongly encouraged to pursue short- or long-term study abroad experiences and major post-graduate fellowship opportunities. Any undergraduate student may also earn “Departmental Honors” in their major, as determined by the major department and coordinated by the Honors College.

Applications for admission to the Honors College are reviewed by the Honors College following the applicant’s admission to Ball State University. The Honors College considers the strength of the high school curriculum (including the Indiana Academic Honors Diploma or equivalent curriculum and value-added experiences such as AP, IB or other special academic courses), extracurricular activities and leadership experiences, letters of reference from teachers familiar with the student’s potential for college academic work, and standardized test scores. Students admitted to the Honors College must make regular progress in the Honors curriculum: students’ grade-point averages must be at least 3.0 at the end of the freshman year and 3.15 at the end of the sophomore year; students should complete at least one Honors core course by the end of the first year; students should complete at least three Honors core courses by the end of the second year. In order to graduate with an Honors diploma, students must complete the Honors curriculum and finish with a cumulative grade-point average of at least 3.33.

Transfer students are also welcome to request admission to the Honors College. Transfer students should contact the dean of the Honors College directly, preferably by e-mail. For more information, contact the dean of the Honors College via e-mail (honors@bsu.edu) or phone, 765-285-1024, or explore the Honors College Web site at www.bsu.edu/honors.

REQUIRED HONORS CURRICULUM

REQUIRED COURSES

Take the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HONR 100</td>
<td>Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td>HONR 189</td>
<td>Inquiries in Global Studies</td>
<td>3</td>
</tr>
<tr>
<td>HONR 199</td>
<td>Inquiries in Contemporary American Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HONR 201</td>
<td>Inquiries in the Ancient World</td>
<td>3</td>
</tr>
<tr>
<td>HONR 202</td>
<td>Inquiries in the Middle Ages, Renaissance, Enlightenment</td>
<td>3</td>
</tr>
<tr>
<td>HONR 203</td>
<td>Inquiries in the Nineteenth, Twentieth, and Twenty-first Centuries</td>
<td>3</td>
</tr>
<tr>
<td>HONR 390</td>
<td>Honors Colloquium</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>HONR 390</td>
<td>Honors Colloquium</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>HONR 499</td>
<td>Senior Honors Project</td>
<td>3</td>
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</table>

3 credits from

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>HONR 296</td>
<td>Inquiries in the Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>HONR 297</td>
<td>Inquiries in the Earth Sciences</td>
<td>3</td>
</tr>
<tr>
<td>HONR 298</td>
<td>Inquiries in the Life Sciences</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 3

Two colloquia on different topics are required for HONR 390.

ALL HONORS COURSES
For a list of all Honors courses, please follow this link (p. 384).
College of Sciences and Humanities

M. McCarthy, Dean; J. Coleman, Associate Dean; K. Smith, Associate Dean; Sheryl Stump, Associate Dean
bsu.edu/sh

The College of Sciences and Humanities equips students with the skills and knowledge they need to be innovative, responsible, and globally engaged twenty-first century citizens.

This College is the largest college at Ball State University; it encompasses disciplines in humanities, social sciences, and mathematical, natural, and computer sciences, and offers more than 80 majors in 16 academic departments. The College provides students with educational experiences designed to enhance their ability to analyze situations, think critically, solve complex problems, and communicate clearly.

Its programs retain the core elements of a traditional liberal arts degree. Students learn alongside their professors in the classroom and the community, broadening their social, cultural, and scientific horizons.

INTERDEPARTMENTAL PROGRAMS

Science

Teacher Education
Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. Refer to the Department of Educational Studies (p. 242) and Teachers College (p. 232) listings in this catalog for descriptions of these courses and other professional requirements of the teacher education program.

Science Teaching Programs
The science teaching majors include earth/space science, life science, and physical science. These programs involve both breadth and depth of study. Preparation is available to teach at the middle school and high school levels. See the Department of Chemistry (p. 175) for the teaching major in chemistry. See the Department of Physics and Astronomy (p. 220) for the teaching major in physics.

MINOR IN GENERAL SCIENCE

36-38 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 120</td>
<td>The Sun and Stars</td>
<td>3</td>
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</tbody>
</table>

TEACHING MAJOR IN EARTH/SPACE SCIENCE (BA/BS)

90 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>ASTR 120</td>
<td>The Sun and Stars</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 124</td>
<td>The Solar System</td>
<td>3</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 105</td>
<td>Laboratory in Physical Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Earth, Life, and Time</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 206</td>
<td>Oceans and Nations</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 207</td>
<td>Environmental Geology -</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Geological/Geochemical Cycles</td>
<td></td>
</tr>
<tr>
<td>GEOL 220</td>
<td>Earth Materials</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 240</td>
<td>Geomorphology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 290</td>
<td>Computer Applications in the</td>
<td>1</td>
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<tr>
<td></td>
<td>Geosciences</td>
<td></td>
</tr>
<tr>
<td>GEOL 350</td>
<td>Physical Hydrology</td>
<td>3</td>
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</table>

Subtotal: 36-38
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>METC 230</td>
<td>Elementary Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>NREM 221</td>
<td>Soil Resources</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
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<td><strong>Subtotal:</strong></td>
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<td><strong>51</strong></td>
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</table>

**SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM**

Professional education sequence, 39 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 251</td>
<td>Human Growth and Development for Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 390</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 320</td>
<td>Reading for Diverse Learners in Secondary Content Classes</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 380</td>
<td>Principles of Teaching in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 460</td>
<td>Student Teaching: Secondary School</td>
<td>6 TO 7</td>
</tr>
<tr>
<td>EDSE 465</td>
<td>Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade</td>
<td>3 OR 5</td>
</tr>
<tr>
<td>SCI 150</td>
<td>Introduction to Teaching Science in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>SCI 295</td>
<td>Introduction to the Teaching of Science</td>
<td>3</td>
</tr>
<tr>
<td>SCI 396</td>
<td>Using Science Methods and Materials</td>
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<td><strong>Subtotal:</strong></td>
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</table>

Subtotal: 90

See Professional Education Assessment/Decision Points (p. 234) for additional information.

**TEACHING MAJOR IN LIFE SCIENCE (BA/BS)**

**94 CREDITS**

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO 210</td>
<td>Introduction to Botany</td>
<td>3</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 215</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 216</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 313</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 315</td>
<td>Methods in Cell Biology</td>
<td>2</td>
</tr>
<tr>
<td>BIO 316</td>
<td>Methods in Ecology</td>
<td>2</td>
</tr>
<tr>
<td>BIO 440</td>
<td>Evolution</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 230</td>
<td>Organic Chemistry for the Life Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 241</td>
<td>Organic Chemistry Laboratory 1: Fundamental Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MATH 181</td>
<td>Elementary Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 251</td>
<td>Human Growth and Development for Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 390</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 320</td>
<td>Reading for Diverse Learners in Secondary Content Classes</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 380</td>
<td>Principles of Teaching in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 460</td>
<td>Student Teaching: Secondary School</td>
<td>6 TO 7</td>
</tr>
<tr>
<td>EDSE 465</td>
<td>Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade</td>
<td>3 OR 5</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

Subtotal: 90

See Professional Education Assessment/Decision Points (p. 234) for additional information.
Subtotal: 92
See Professional Education Assessment/Decision Points (p. 234) for additional information.

Social Studies

Teacher Education
Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. Refer to the Department of Educational Studies (p. 242) and Teachers College (p. 232) listings in this catalog for descriptions of these courses and other professional requirements of the teacher education program.

TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)
99 CREDITS
All students seeking to become candidates for licensure in Social Studies will, via course completion and performance assessment, demonstrate mastery of the subject matter in the individual disciplines: economics, geography, government, psychology, sociology, and historical perspectives (United States and world history). See department statements for course requirements.

Students will demonstrate that mastery as a result of intensive preparation in two or more disciplines, one of which must be historical perspectives. Students will complete 30 credits in historical perspectives to facilitate preparation in both United States and world history, complemented by preparation in one other discipline (15 credits in: economics, geography, government/political science, psychology, or sociology), and four other courses (12 credits), one from each of the four other disciplines, totaling 57 credits. Students are encouraged to pursue additional licensure in one or more of the other four disciplines. Teaching programs require additional courses in educational methods. The professional education courses are included in this listing.

Historical perspectives, 30 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST 151</td>
<td>World Civilization 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 152</td>
<td>World Civilization 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 200</td>
<td>Introduction to History and Historical Methods</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>United States History, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>Two courses from category 1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One course from category 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One course from category 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One course from category 4</td>
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<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 30

Students must register for HIST 200 before completing 15 credits in the major. The department strongly encourages students to consider taking HIST 470 and two other courses required to complete an additional departmental major in history.

History categories
Category 1: U.S. History

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 210</td>
<td>Introduction to Black History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 215</td>
<td>Women in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 318</td>
<td>History of the American West</td>
<td>3</td>
</tr>
<tr>
<td>HIST 400</td>
<td>Colonial America, 1492-1763</td>
<td>3</td>
</tr>
<tr>
<td>HIST 401</td>
<td>Revolutionary America, 1763-1800</td>
<td>3</td>
</tr>
<tr>
<td>HIST 405</td>
<td>Pre-Civil War America, 1800-1848</td>
<td>3</td>
</tr>
<tr>
<td>HIST 407</td>
<td>American Civil War and Reconstruction, 1848-1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 409</td>
<td>An Age of Reform: The United States in the Gilded Age and Progressive Era</td>
<td>3</td>
</tr>
<tr>
<td>HIST 411</td>
<td>The American People in Prosperity, Depression, and War</td>
<td>3</td>
</tr>
<tr>
<td>HIST 413</td>
<td>Post-World War II America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 415</td>
<td>History of Indiana</td>
<td>3</td>
</tr>
<tr>
<td>HIST 416</td>
<td>Pre-Civil War South, 1776-1861</td>
<td>3</td>
</tr>
<tr>
<td>HIST 417</td>
<td>History of the New South</td>
<td>3</td>
</tr>
<tr>
<td>HIST 430</td>
<td>United States Diplomatic History to 1914</td>
<td>3</td>
</tr>
<tr>
<td>HIST 432</td>
<td>United States Diplomatic History Since 1914</td>
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Category 2: European History

<table>
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<th>Credits</th>
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<tr>
<td>HIST 454</td>
<td>The Era of World War I, 1870-1918</td>
<td>3</td>
</tr>
<tr>
<td>HIST 455</td>
<td>The Era of World War II, 1918-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 456</td>
<td>Europe Since 1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 461</td>
<td>Development of Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 462</td>
<td>Development of Roman Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 463</td>
<td>Medieval Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 464</td>
<td>Development of Byzantine Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 467</td>
<td>The Renaissance and Reformation, 1300-1600</td>
<td>3</td>
</tr>
<tr>
<td>HIST 471</td>
<td>France Since 1789</td>
<td>3</td>
</tr>
<tr>
<td>HIST 475</td>
<td>Britain, 1485-1714</td>
<td>3</td>
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<td>HIST 476</td>
<td>Britain, 1760 to the Present</td>
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<tr>
<td>HIST 481</td>
<td>Modern Germany</td>
<td>3</td>
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<tr>
<td>HIST 482</td>
<td>Cultural History of the Celtic Peoples from Prehistory to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 483</td>
<td>Irish History</td>
<td>3</td>
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<tr>
<td>HIST 486</td>
<td>Russian Civilization before 1917: From Kievan Rus to Imperial Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 487</td>
<td>Soviet and Post-Soviet History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 480</td>
<td>Selected Topics in European History</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>HIST 490</td>
<td>Selected Topics in American History</td>
<td>3 TO 6</td>
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Please consult the department chairperson for more information.

Second (concentration) licensure area:
Add one course from each of the remaining areas: Economics, geography, government/political science, psychology, or sociology.

**Subtotal: 15**

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
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**Subtotal: 15**

Geography concentration, 15 credits

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>GEOG 120</td>
<td>Economic Geographies of Globalization</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
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<tr>
<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 credits from</td>
<td></td>
</tr>
<tr>
<td>GEOG 321</td>
<td>Urban Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 340</td>
<td>Cartography and Visualization of Spatial Data</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 342</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 350</td>
<td>Geography of the United States and Canada</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 351</td>
<td>Geography of Latin America and the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 353</td>
<td>Geography of Indiana</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 354</td>
<td>Geography of Asia</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 356</td>
<td>Geography of Russia and Its Neighbors</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 357</td>
<td>Geography of Europe</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 423</td>
<td>Population Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 470</td>
<td>Political Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 15**
Government/Political Science concentration, 15 credits

- POLS 130 American National Government 3
- POLS 237 State and Local Politics 3
- POLS 312 Early Western Political Thought 3
- or
- POLS 313 Modern Western Political Thought 3

6 credits from
- POLS 210 Political Science Research Methods 3
- POLS 280 Comparative Political Systems 3
- POLS 293 International Relations 3
- POLS 342 Problems in Public Policy 3

Subtotal: 15

Psychology concentration, 15 credits

- PSYS 100 Introduction to Psychological Science 3
- PSYS 493 Teaching of Psychology 1 1
- PSYS 494 Teaching of Psychology 2 2

3 credits from
- PSYS 367 Introduction to Neuroscience 3
- PSYS 468 Cognitive Neuroscience 3

3 credits from
- PSYS 362 Motivation and Emotion 3
- PSYS 363 Cognitive Psychology 3
- PSYS 364 Psychology of Learning 3

3 credits from
- PSYS 316 Social Psychology 3
- PSYS 317 Personality 3
- PSYS 318 Psychopathology 3
- PSYS 324 Psychology of Women 3

Subtotal: 15

Sociology concentration, 15 credits

- SOC 100 Principles of Sociology (3)
- Sociology: SOC 100 Principles of Sociology (3)

Subtotal: 12

Social Science Requirement, 12 credits

- Economics: ECON 116 Survey of Economic Ideas (3)
- Geography: GEOG 150 Global Geography (3)
- Political Science: POLS 130 American National Government (3)

Each student’s program of study must include at least one of the following courses: PSYS 416, PSYS 432, or PSYS 468. PSYS 493 and PSYS 494 are taken in sequence after the completion of all other PSYS courses.

Social Science Requirement, 12 credits

Each student must satisfactorily compile artifacts from sociology courses for the Social Science Teacher Education Portfolio in accordance with department standards.

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

Professional education sequence, 42 credits

- EDFO 420 Social, Historical, and Philosophical Foundations of Education 3
- EDJH 385 Principles of Teaching in the Middle School 3
- EDMU 205 Introduction to Multicultural Education 3
- EDPS 251 Human Growth and Development for Secondary Education 3
- EDPS 390 Educational Psychology 3
- EDSE 320 Reading for Diverse Learners in Secondary Content Classes 3
- EDSE 380 Principles of Teaching in the Secondary School 3
- EDSE 460 Student Teaching: Secondary School 6 TO 7
- EDSE 465 Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade 3 OR 5
SS 150  Introduction to Teaching History/Social Studies in Secondary Schools  3
SS 350  Teaching History/Social Studies in Junior High/Middle School  3
SS 395  Teaching Social Studies in Secondary Schools  3

Subtotal: 42

Subtotal: 99

See Professional Education Assessment/Decision Points (p. 234) for additional information.

ANTHROPOLOGY
J. Coleman, Chairperson
bsu.edu/anthropology

As the study of humankind, anthropology is part of the social sciences at Ball State University. It draws upon theory, methodology, and data from the humanities and biological sciences as well. Cultural anthropology is concerned with the ways people organize themselves socially in different types of groups. Archaeology is concerned with how human culture has evolved and changed through time. Biological anthropology examines the evolution and adaptation of the species, and explores variations among past and present living populations, the biological bases of human behavior, and primate studies. Linguistics, which is taught in the Ball State University Department of English, is concerned with the nature and history of language and its role in human culture. The department offers cultural field schools abroad, prehistoric and historic archaeological field schools, educational opportunities through Ball State’s Applied Anthropology Laboratory, and internship opportunities.

The anthropology major offers a core program designed to develop a foundation in all subfields of anthropology. The department also offers a minor in anthropology and the opportunity to earn departmental honors.

MAJOR IN ANTHROPOLOGY (BA/BS)

39 CREDITS

Core requirements, 12 credits

ANTH 101  Introduction to Cultural Anthropology  3
ANTH 103  Archaeology and Culture  3
ANTH 105  Introduction to Biological Anthropology  3

No individual course may be counted for both the methods requirement and the direct elective requirement in any area.

Methods A/B/C, 9 credits
One ANTH Methods course from Area A: Archaeology (3 credits)
One ANTH Methods course from Area B: Biological (3 credits)
One ANTH Methods course from Area C: Cultural (3 credits)

Subtotal: 9

ANTH Electives, 15 credits
One ANTH Directed Elective course from Area A: Archaeology (3 credits)
One ANTH Directed Elective course from Area B: Biological (3 credits)
One ANTH Directed Elective course from Area C: Cultural (3 credits)
Two ANTH Elective courses from any area (6 credits)

Subtotal: 15

ANTH UCC Tier 3 Capstone, 3 credits

Subtotal: 3

Complete 9 credits methods, 3 from each Area
Area A: Archaeology
ANTH 313  Fundamentals of Archaeology  3
ANTH 429  Laboratory Methods in Material Culture  3
ANTH 457  Applied Archaeology  3
ANTH 463  Theory and Method in Historical Archaeology  3

Area B: Biological
ANTH 416  Human Osteology  3
ANTH 417  Forensic Anthropology  3
ANTH 427  Culture and Medicine  3

Area C: Cultural
ANTH 314  Applied Anthropology  3
ANTH 409  Digital Anthropology  3
ANTH 459  Ethnographic Methods  3

Complete 9 credits methods, 3 from each Area
Area A: Archaeology
ANTH 310  Topics in Old World Prehistory  3 TO
ANTH 343  Historical Archaeology of Eastern United States  3  
ANTH 364  European Prehistory  3  
ANTH 420  Topics in New World Archaeology  3 TO 6  
ANTH 429  Laboratory Methods in Material Culture  3  
ANTH 434  Midwestern Archaeology  3  
ANTH 457  Applied Archaeology  3  
ANTH 463  Theory and Method in Historical Archaeology  3  

Area B: Biological  
ANTH 315  Human Paleontology  3  
ANTH 405  Human Biological Variation  3  
ANTH 406  Life History Theory of Growth, Maintenance, and Reproduction  3  
ANTH 416  Human Osteology  3  
ANTH 417  Forensic Anthropology  3  
ANTH 427  Culture and Medicine  3  
ANTH 455  Primatology  3  
ANTH 462  Special Topics in Biological Anthropology  3 TO 6  

Area C: Cultural  
ANTH 231  Introduction to Native American Studies  3  
ANTH 241  Gender, Sex, and Sexuality  3  
ANTH 242  Folklore and Folklife  3  
ANTH 308  Introduction to Anthropological Linguistics  3  
ANTH 311  Ethnicity and Race  3  
ANTH 312  Ecological Dimensions of Culture  3  
ANTH 314  Applied Anthropology  3  
ANTH 342  Anthropology of the United States  3  
ANTH 409  Digital Anthropology  3  
ANTH 432  Native Americans of the Eastern Woodlands, 16th-20th Century  3  
ANTH 451  Witchcraft, Magic, and Religion  3  
ANTH 452  Anthropology of Technology  3  
ANTH 471  Ethnohistory  3  

Complete 6 additional credits of ANTH electives from area A, B, or C  

Subtotal: 6  

Complete 3 credits from the following UCC Tier 3 Capstone  
ANTH 369  Paid Internship in Anthropology  1 TO 3  
ANTH 445  Archaeological Field School  3 TO 6  
ANTH 450  Ethnographic Field School  3 TO 6  
ANTH 459  Ethnographic Methods  3  
ANTH 479  Unpaid Internship  1 TO 3  

At least 9 anthropology credits must be numbered 300-400 level. No more than 6 credits of UCC Tier 3 Capstone courses (ANTH 445, 450, 459) and no more than 3 internship credits (ANTH 369 or 479) will count toward the major.  
Subtotal: 39  
Total Credit Hours: 39  

MINOR IN ANTHROPOLOGY  
18 CREDITS  
6 credits from  
ANTH 101  Introduction to Cultural Anthropology  3  
ANTH 103  Archaeology and Culture  3  
ANTH 105  Introduction to Biological Anthropology  3  
ANTH 111  Anthropology of Everyday Life  3  

Complete 3 credits of methods from Area A, B, or C  
Area A: Archaeology  
ANTH 313  Fundamentals of Archaeology  3  
ANTH 429  Laboratory Methods in Material Culture  3  
ANTH 457  Applied Archaeology  3  
ANTH 463  Theory and Method in Historical Archaeology  3  

Subtotal: 3  

Area B: Biological  
ANTH 416  Human Osteology  3  
ANTH 417  Forensic Anthropology  3  
ANTH 427  Culture and Medicine  3  

Area C: Cultural  
ANTH 314  Applied Anthropology  3  
ANTH 409  Digital Anthropology  3  
ANTH 459  Ethnographic Methods  3  

Subtotal: 6
Complete 9 credits of anthropology directed electives from Areas A, B, or C  

**Subtotal: 12**

**Area A: Archaeology**
- **ANTH 310** Topics in Old World Prehistory 3 TO 6
- **ANTH 343** Historical Archaeology of Eastern United States 3
- **ANTH 364** European Prehistory 3
- **ANTH 420** Topics in New World Archaeology 3 TO 6
- **ANTH 429** Laboratory Methods in Material Culture 3
- **ANTH 434** Midwestern Archaeology 3
- **ANTH 457** Applied Archaeology 3
- **ANTH 463** Theory and Method in Historical Archaeology 3

**Subtotal: 3**

**Area B: Biological**
- **ANTH 315** Human Paleontology 3
- **ANTH 405** Human Biological Variation 3
- **ANTH 406** Life History Theory of Growth, Maintenance, and Reproduction 3
- **ANTH 416** Human Osteology 3
- **ANTH 417** Forensic Anthropology 3
- **ANTH 427** Culture and Medicine 3
- **ANTH 455** Primatology 3
- **ANTH 462** Special Topics in Biological Anthropology 3 TO 6

**Subtotal: 18**

**BIOLOGY**
K. Badger, Chairperson  
bsu.edu/biology

The Department of Biology offers programs for students preparing for careers in science teaching, laboratory biology, environmental biology, and health professions such as medicine, medical technology, and dentistry. The laboratory sciences of cellular and molecular biology, genetics, and microbiology offer in-depth opportunities for students pursuing bioscience positions in medicine, government, academia, and industry. Experiences with the modern tools of biotechnology are a central theme for all laboratory biology concentrations and the department offers a biotechnology certification program. Biologists in environmental careers work to maintain the natural world for future generations. The department’s conservation biology programs focus on preparing students for careers related to the conservation of plant and animal biodiversity and the science supporting the sustainable management of aquatic and terrestrial ecosystems. Further information about careers for biology majors can be found on our departmental Web site www.bsu.edu/biology.

The biology major offers a core program intended to develop a common background in biology and additional courses in specialized concentrations designed to prepare students for careers or graduate work in aquatic biology and fisheries, field botany, cellular and molecular biology, environmental biology, genetics, microbiology, wildlife biology and conservation, and zoology. Our general biology concentration allows students to pursue an individualized program for their specific career goals as a biologist. Pre-professional majors add selected courses to meet entrance requirements into medical, dental, and medical technology schools. A teaching major in life science is offered for students who plan to teach in the secondary schools. (Additional course requirements for science teaching programs appear in this catalog under Interdepartmental Programs (p. 160) in the College of Sciences and Humanities.) It is strongly recommended that students seek departmental advising, on an individual basis, early in their programs to plan course work sequences and obtain specific information about their selected emphasis areas and possible certification.

**MAJOR IN BIOLOGY (BA/BS)**

**65-74 CREDITS**

**Requirements for Graduation**
Biology majors must earn a minimum grade of C (2.0) in BIO 111 and BIO 112 in order to progress into 200-400 level biology courses and must earn a minimum grade of C (2.0) in BIO 210 in order to graduate.

**Course Limitations**

Students may withdraw, and/or attempt for a grade, from the Biology Common Core courses a maximum of three times. These courses include: BIO 111, BIO 112, BIO 210, BIO 214, BIO 215, BIO 216, BIO 315 or BIO 316, and BIO 499.

Students should refer to the individual Concentrations regarding any course limitations relevant to courses in the specific Concentrations.

**Common core, 47-48 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO 210</td>
<td>Introduction to Botany</td>
<td>3</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 215</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 216</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 315</td>
<td>Methods in Cell Biology or Methods in Ecology</td>
<td>2</td>
</tr>
<tr>
<td>BIO 316</td>
<td>Methods in Ecology</td>
<td>2</td>
</tr>
<tr>
<td>BIO 499</td>
<td>Biology Undergraduate Symposium</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 231</td>
<td>Organic Chemistry for Molecular-Based Sciences: Part 1</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 241</td>
<td>Organic Chemistry Laboratory 1: Fundamental Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MATH 108</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Precalculus-Trigonometry or Applied Calculus 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 161</td>
<td>Applied Calculus 1 or Calculus 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
</tbody>
</table>

**Subtotal: 47-48**

Complete one concentration

Concentration 1: General, 18-24 credits

Six elective courses at the 300-level or above in ANAT, BIO, BIOT, BOT, PHYS, or ZOOL. Courses taken to fulfill University Core Curriculum requirements and biology major requirements may not be used as electives in this category.

**Subtotal: 65-74**

Concentration 2: Wildlife biology and conservation, 25-26 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
<tr>
<td>BOT 380</td>
<td>Forestry</td>
<td>3</td>
</tr>
<tr>
<td>BOT 440</td>
<td>Taxonomy of Vascular Plants</td>
<td>4</td>
</tr>
<tr>
<td>BOT 470</td>
<td>Dendrology or Aquatic Botany</td>
<td>3</td>
</tr>
<tr>
<td>BOT 481</td>
<td>Aquatic Botany</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 440</td>
<td>Ornithology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 446</td>
<td>Mammalogy</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 483</td>
<td>Wildlife Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 72-74**

Concentration 3: Aquatic biology and fisheries, 22-23 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
<tr>
<td>BIO 480</td>
<td>Limnology</td>
<td>3</td>
</tr>
<tr>
<td>BOT 481</td>
<td>Aquatic Botany or Fishery Resources Management</td>
<td>4</td>
</tr>
<tr>
<td>ZOOL 465</td>
<td>Fishery Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 432</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>ZOOL 444</td>
<td>Ichthyology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 484</td>
<td>Aquatic Entomology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 161</td>
<td>Applied Calculus 1</td>
<td>3</td>
</tr>
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</table>

**Subtotal: 69-71**
American Fisheries Society professional certification requirements should be considered. See aquatic biology and fisheries advisor in the Department of Biology for information.

Concentration 4: Microbiology, 26 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 313</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 341</td>
<td>Pathogenic Bacteriology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 444</td>
<td>Immunology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 446</td>
<td>Applied Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BOT 446</td>
<td>Medical Mycology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 360</td>
<td>Essentials of Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 361</td>
<td>Introductory Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 credits from 200-400 level BIO, BIOT, BOT or ZOOL</td>
<td>5</td>
</tr>
</tbody>
</table>

Subtotal: 73-74

Concentration 5: Genetics, 21 credits

Genetics concentration students must earn a minimum grade of C (2.0) in BIO 214 (Genetics) in order to progress into the concentration specific classes.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
<tr>
<td>BIO 452</td>
<td>Advanced Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 453</td>
<td>Human Genetics and the Problems of Humanity</td>
<td>3</td>
</tr>
<tr>
<td>BIO 454</td>
<td>Development and Evolution of Genomes: Genomics and Proteomics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 457</td>
<td>Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5 credits from 200-400 level BIO, BIOT, BOT or ZOOL</td>
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</table>

Subtotal: 68-69

Concentration 6: Cellular and molecular biology, 25 credits

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<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 313</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 444</td>
<td>Immunology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 457</td>
<td>Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 470</td>
<td>Developmental Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 360</td>
<td>Essentials of Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 361</td>
<td>Introductory Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>CHEM 463</td>
<td>Principles of Biochemistry 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td>CHEM 465</td>
<td>Biochemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Techniques</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 credits from</td>
<td></td>
</tr>
<tr>
<td>BIO 369</td>
<td>Internship in Biology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TO 6</td>
<td></td>
</tr>
<tr>
<td>BIO 394</td>
<td>Practicum in Biology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TO 3</td>
<td></td>
</tr>
<tr>
<td>BIO 456</td>
<td>Cancer Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 498</td>
<td>Undergraduate Research</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TO 3</td>
<td></td>
</tr>
<tr>
<td>BIOT</td>
<td>(any 2 BIOT classes, except BIOT 493)</td>
<td></td>
</tr>
<tr>
<td>BOT 451</td>
<td>Plant Physiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 464</td>
<td>Principles of Biochemistry 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 72-73

Recommended electives are BIO 341, BIO 446, BIO 452, BIO 453, BIO 460, BIO 482; BIOT 493; BOT 446; MATH 162 or 166; PHYC 112 or PHYC 122; or SCI 501.

Concentration 7: Field botany, 23 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
<tr>
<td>BOT 380</td>
<td>Forestry</td>
<td>3</td>
</tr>
<tr>
<td>BOT 440</td>
<td>Taxonomy of Vascular Plants</td>
<td>4</td>
</tr>
<tr>
<td>BOT 470</td>
<td>Dendrology</td>
<td>3</td>
</tr>
<tr>
<td>BOT 480</td>
<td>Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BOT 481</td>
<td>Aquatic Botany</td>
<td>4</td>
</tr>
<tr>
<td>NREM 221</td>
<td>Soil Resources</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 70-71

Concentration 8: Zoology, 21-22 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOOL 330</td>
<td>Structure and Development of Vertebrates</td>
<td>5</td>
</tr>
<tr>
<td>ZOOL 432</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>12-13 credits from</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At least 9 credits must be taken from ZOOL</td>
<td></td>
</tr>
<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 360</td>
<td>Essentials of Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 361</td>
<td>Introductory Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 361</td>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td>ZOOL 347</td>
<td>Animal Parasitology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 440</td>
<td>Ornithology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 441</td>
<td>Entomology</td>
<td>3</td>
</tr>
</tbody>
</table>
MAJOR IN MEDICAL TECHNOLOGY (BA/BS)
This program leads to a bachelor of science degree with a major in medical technology. The medical technologist is prepared for such laboratory work as bacteriology, chemistry, serology, and blood bank technology in hospital laboratories, physicians’ and surgeons’ clinics, and federal, state, and municipal health laboratories as well as research laboratories and commercial companies making biological products.

The departmental major in medical technology and the University Core Curriculum requirements and elective courses, all of which must total at least 88 credits, are to be completed in the first three years of study. The fourth or senior year consists of a twelve-month clinical laboratory program in an accredited hospital school of medical technology. Thirty-two credits are granted for the successful completion of this year. The minimum total for the degree is 120 credits.

Admission to a school of medical technology is determined entirely by the school applied to and is based on such considerations as scholastic standing (e.g., minimum grade-point average of 2.5), personal interviews, and recommendations. Completion of the first three years does not guarantee admission to the clinical year; students are therefore advised to plan an alternative program that may be completed in the fourth year. Students may then reapply for the clinical year.

The university has established affiliations for preparation of medical technologists with the following Indiana hospitals: Saint Francis Hospital in Beech Grove, Parkview Hospital in Fort Wayne, IU Health Methodist Hospital in Indianapolis, Good Samaritan Hospital in Vincennes, and St. Margaret Mercy Health Care Centers in Hammond. We are also affiliated with Vanderbilt University Medical Center in Tennessee.

MAJOR IN MEDICAL TECHNOLOGY (BA/BS)
60 credits
Recommended electives are BIO 112, BIO 214, BIO 215; PHYC 110; and MGT 300.

ANAT 201  Fundamentals of Human Anatomy  3
BIO 111  Principles of Biology 1  4
BIO 112  Principles of Biology 2  4
BIO 215  Cell Biology  3

Subtotal: 60

PRE-DENTISTRY PROGRAM
Although most students entering dental school will have completed four years of predental work, those with outstanding qualifications may be admitted after only three years. To qualify for admission to the Indiana University School of Dentistry at the close of three years of predental preparation, students must complete the major and specific course and scholastic requirements of the curriculum with a minimum of 92 credits at Ball State University. If accepted into dental school, they will use the credit earned the first year in the Indiana University School of Dentistry (28 credits) to meet the senior year course requirements for the baccalaureate degree from Ball State.

In addition to the basic science requirements, students entering the Indiana University School of Dentistry will be required to have 20 credits of Biology for majors; 15 credits of Chemistry including general, organic and biochemistry; 8 credits of general Physics; 3 credits of Social Sciences; and 3 credits of Humanities. The following courses are recommended for elective credit: BIO 313; CHEM 232; CC 102.

To be admitted to the Indiana University School of Dentistry, students must earn satisfactory scores on the Dental Admission Test given by the American Dental Association. Students are responsible for applying to the dental school and making arrangements to take the admission test. Students should take the test in the spring semester fifteen months before they hope to enroll in dental school, but preferably only after completing the
required biology and chemistry courses. Students should formally apply for admission to dental school the next summer, twelve months in advance.

Predental counseling is available in the Department of Biology.

**PRE-DENTISTRY PROGRAM (BA/BS)**

42 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 215</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 315</td>
<td>Methods in Cell Biology</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 231</td>
<td>Organic Chemistry for Molecular-Based Sciences: Part 1</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 241</td>
<td>Organic Chemistry Laboratory 1: Fundamental Techniques</td>
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</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 112</td>
<td>General Physics 2</td>
<td>4</td>
</tr>
<tr>
<td>ZOOL 330</td>
<td>Structure and Development of Vertebrates</td>
<td>5</td>
</tr>
</tbody>
</table>

Subtotal: 42

**PRE-MEDICINE PROGRAM**

In addition to general graduation requirements at Ball State, students wishing to complete this major must take biology, chemistry, and physics courses that meet or exceed the science requirements for admission to most medical schools. Some medical schools also require general psychology and sociology. Because admission to a medical school is not guaranteed (only 45 percent of applicants nationwide are admitted to medical schools), each pre-med student should complete another major in any subject.

The following courses are recommended for elective credit in the first three years: mathematics; BIO 214, BIO 313, BIO 444; ANAT 201 and PHYC 215. Except when required to complete an undergraduate major, courses in human anatomy, human physiology, medical bacteriology, medical biochemistry, and medical pharmacology will not be accepted by the School of Medicine as part of the 94 liberal arts credits.

Students should take the Medical College Admission Test in the spring or summer, twelve to fifteen months before they hope to enroll in medical school and should formally apply for admission to medical school that same summer, twelve months in advance.

Premedical counseling is available in the Department of Biology.

**PRE-MEDICINE PROGRAM (BA/BS)**

55-59 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO 215</td>
<td>Cell Biology</td>
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</tr>
<tr>
<td>BIO 315</td>
<td>Methods in Cell Biology</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 111</td>
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<td>CHEM 112</td>
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<td>CHEM 225</td>
<td>Chemical Analysis</td>
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<tr>
<td>CHEM 232</td>
<td>Organic Chemistry for Molecular-Based Sciences: Part 2</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 241</td>
<td>Organic Chemistry Laboratory 1: Fundamental Techniques</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 242</td>
<td>Organic Chemistry Laboratory 2: Synthesis and Characterization</td>
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</tr>
<tr>
<td>CHEM 234</td>
<td>Organic Chemistry 1</td>
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<tr>
<td>CHEM 235</td>
<td>Organic Chemistry 2</td>
<td>5</td>
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<tr>
<td>CHEM 360</td>
<td>Essentials of Biochemistry and</td>
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<tr>
<td>CHEM 361</td>
<td>Introductory Biochemistry Laboratory</td>
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<td>CHEM 463</td>
<td>Principles of Biochemistry 1</td>
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<td>CHEM 464</td>
<td>Principles of Biochemistry 2</td>
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<td>PHYC 110</td>
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<tr>
<td>PHYC 112</td>
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<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
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</tr>
<tr>
<td>SOC 100</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 330</td>
<td>Structure and Development of Vertebrates</td>
<td>5</td>
</tr>
</tbody>
</table>

Subtotal: 55-59

**PREOPTOMETRY PROGRAM**

**DEGREE REQUIREMENTS**

Students entering the Indiana University School of Optometry with a bachelor’s degree must have the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
</tbody>
</table>
BIO 111  Principles of Biology 1  4
BIO 214  Genetics  4
PHYS 215  Human Physiology  5
CHEM 111  General Chemistry 1  4
CHEM 112  General Chemistry 2  4
CHEM 230  Organic Chemistry for the Life Sciences  3
CHEM 241  Organic Chemistry Laboratory 1: Fundamental Techniques  1
CHEM 360  Essentials of Biochemistry  3
CHEM 361  Introductory Biochemistry Laboratory  1
ENG 104  Composing Research and
BIO 315  Methods in Cell Biology  2
BIO 316  Methods in Ecology  2
English elective  3
MATH 165  Calculus 1  4
MATH 166  Calculus 2  4
PHYC 110  General Physics 1  4
PHYC 112  General Physics 2  4
PSYS 100  Introduction to Psychological Science  3
PSYS 241  Statistics  3
MATH 221  Probability and Statistics  3
BIO 448  Biometry  3
ZOOL 330  Structure and Development of Vertebrates  5

Students entering the Indiana University School of Optometry without a bachelor's degree must have the following courses in addition to the above:

Arts and Humanities  6 credits
Foreign Language  6 credits

(May be exempt if 2 or more years of a single foreign language were completed in high school with an average grade of C or above)

Social & Behavioral Sciences  6 credits

Students must have earned a minimum of 108 credit hours. Median GPA for admission is 3.6. OAT mean scores average 325 in most areas.

Other strongly recommended courses include Cell Biology (BIO 215 and BIO 315), Human Embryology and Histology (ANAT 425), Research (BIO 498 or CHEM 470), Business (ECON 116, BUSAD 101 or MGT 200 or 300), Medical Terminology (NURS 101), Philosophy 100, and Ethics (Philosophy 202).

Application to IU School of Optometry is made through OptomCAS and Indiana University’s Graduate e-APP system. You must also complete the “Optometry Departmental Questions” form which consists of a prerequisites worksheet and a short essay section. Applications are due by February 1. Supplementary materials like letters of recommendation are due by February 28. Applicants must take the Optometry Admissions Test (OAT) and provide the official score report by February 1. The OAT is offered year round on computer but you must wait 90 days after an administration to be able to take the test again. It is recommended that you take the exam in late spring or early summer following your Junior year to allow time for a re-take if needed. For details on the application process access the following five web sites:

https://optometry.iu.edu/admissions/apply/doctor-of-optometry/index.html (general information),
www.optomcas.org (application), www.opted.org (OAT),
https://graduate.indiana.edu/admissions/apply.html (Graduate e-APP system), and
https://www.indiana.edu/~grdforms/deptforms/optb.html (IU Optometry application).

PREPHARMACY PROGRAM

The prepharmacy program is designed for students who want to apply for admission to the Butler University College of Pharmacy or the Purdue University School of Pharmacy. When completed satisfactorily, the designated courses will meet the preprofessional curricular requirements of Purdue and Butler at the end of the second year. At both Purdue and Butler the combined prepharmacy-pharmacy program leading to the Doctor of Pharmacy requires six years. However, the number of applicants to any college of pharmacy exceeds the capacity of the school. Therefore, students are selected for
admission into the prepharmacy and pharmacy programs at these schools based on considerations such as scholastic standing, character, and professional aptitude. Students should become familiar with the admission requirements stated in the bulletins of Butler and Purdue Universities. Careful arrangement of the program for each year is essential so that courses may be completed in sequence and in the allotted time. In particular, general chemistry should be completed in the freshman year. Mathematics, including calculus, is highly desirable. Copies of the programs are available from the pre-pharmacy advisor located in the biology department. There are minor differences in requirements between the School of Pharmacy at Purdue and the College of Pharmacy at Butler.

The prepharmacy programs do not lead to graduation from Ball State University. They merely supply students with an approved sequence of courses for the first two years of the complete six-year program. Furthermore, physical education is not a part of this program for students who hope to transfer to Purdue, but it is for those who hope to go to Butler. Students who drop out of the prepharmacy program and elect to follow degree programs of Ball State University will be expected to meet all Ball State degree requirements.

Prepharmacy counseling is available in the Department of Biology.

PREVETERINARY PROGRAM

DEGREE REQUIREMENTS

In order to apply for admission to the professional program at Purdue University’s School of Veterinary Medicine, you must first complete the minimum prerequisite course work shown below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 313</td>
<td>Microbiology</td>
<td>4</td>
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<tr>
<td>ENG 104</td>
<td>Composing Research</td>
<td>3</td>
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<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 231</td>
<td>Organic Chemistry for Molecular-Based Sciences: Part 1</td>
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</tr>
<tr>
<td>CHEM 232</td>
<td>Organic Chemistry for Molecular-Based Sciences: Part 2</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 241</td>
<td>Organic Chemistry Laboratory 1: Fundamental Techniques</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 242</td>
<td>Organic Chemistry Laboratory 2: Synthesis and Characterization</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 360</td>
<td>Essentials of Biochemistry</td>
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</tr>
<tr>
<td>CHEM 361</td>
<td>Introductory Biochemistry Laboratory</td>
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<td>CHEM 463</td>
<td>Principles of Biochemistry 1</td>
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<tr>
<td>CHEM 464</td>
<td>Principles of Biochemistry 2</td>
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</tr>
<tr>
<td>COMM 210</td>
<td>Fundamentals of Public Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 108</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
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<tr>
<td>PHYC 112</td>
<td>General Physics 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO 448</td>
<td>Biometry</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives:

- Humanities* 9 credits
- Concentrating** 3 credits

*Humanities electives include: English, Communication, Foreign Language, Psychology, Philosophy, Creative Arts, Education, Sociology, Anthropology, Political Science, Economics, and History. (Courses in business, writing and macroeconomics are highly recommended.)

**Concentrating electives should be selected so as to provide thorough preparation in an area related to one’s BS program and professional career goals. Additional recommended courses include: Chemical Analysis (CHEM 225), Structure & Development of Vertebrates (ZOOL 330), Immunology (BIO 444), Principles of Accounting (ACC 201), Micro- and Macro-Economics (ECON 201, ECON 202), Personal Finance (FIN 110), and Management (MGT 300).

Although the requirements outlined above provide an adequate background for entrance into the professional school, the minimally prepared applicant will face competition from applicants with more advanced college work. Since the total number of applicants exceeds the number of available places in the veterinary school, the pre-veterinary student is encouraged to have an alternative goal and major in some one subject matter area toward which the above courses may be applied; a major in Biology with a Zoology option is recommended. Although the minimum GPA for resident application is a 3.0, the overall mean resident GPA for admission to Purdue School of Veterinary Medicine for the class starting in the Fall of 2018 was a 3.78. Nonresident GPA means were similar. Purdue also seriously considers veterinary experience, non-veterinary animal experience, extracurricular activities, paid employment, references, and the
applicant interview in the evaluation process.

Students enter veterinary school only in the fall. The application deadline is around October 1 each year. The GRE (Graduate Record Exam) is no longer required for admission to Purdue, but other schools do still require it. Students planning a veterinary program at Purdue are urged to consult with the Director of Student Services, College of Veterinary Medicine, 625 Harrison St, Purdue University, West Lafayette, Indiana 47907-1240 or phone (765) 494-7893. The pre-veterinary advisor at Ball State University is Dr. Jennifer Metzler, Department of Biology. Application to schools of Veterinary Medicine is completed on-line through the Veterinary Medical College Application Service (VMCAS) at http://www.aavmc.org/

(Minimum prerequisite course work for other veterinary schools may be somewhat different although much of the required course work is the same for most schools. Specific inquiry to other veterinary schools should be made to clarify pre-requisites for each different veterinary program.)

For recent updates check on-line at https://www.bsu.edu/academics/collegesanddepartments/biology/academic-programs choose Bachelors Degree Options then Pre-Health Professions Programs.

Subtotal: 71

PREPHYSICIAN’S ASSISTANT—PRECHIROPRACTIC
Courses are offered that fulfill requirements for those students who are planning to apply for admission to schools of physician’s assistant and prechiropractic. Preprofessional counseling for these programs is available in the Department of Biology.

MINOR IN BIOLOGY
19-20 CREDITS
Students planning to minor in biology should choose 200-level courses which fulfill prerequisites for 300- and 400-level courses in the minor. The 300- and 400-level courses should be chosen from the concentrations listed for biology majors. BIO 369, BIO 394, and BIO 498 do not count in the minor. Minors may choose only one area of emphasis.

Choose one group

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
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<tr>
<td>BIO 112</td>
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<td>4</td>
</tr>
<tr>
<td>or</td>
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</tbody>
</table>

Subtotal: 8-9

Choose one area of emphasis
Cellular/molecular biology emphasis, 11 credits
Directed electives

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
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<td>7 credits from</td>
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<td>BIO 215</td>
<td>Cell Biology</td>
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<tr>
<td>300- or 400-level courses in BIO, BIOT, BOT, or ZOOL</td>
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</table>

Subtotal: 11

Environmental science emphasis, 11 credits
Directed electives

<table>
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<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 210</td>
<td>Introduction to Botany</td>
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<td>8 credits from</td>
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<tr>
<td>BIO 216</td>
<td>Ecology</td>
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</table>

Subtotal: 11

Subtotal: 19-20

MINOR IN PHYSIOLOGY
20-21 CREDITS
Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
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<td>PHYS 215</td>
<td>Human Physiology</td>
<td>5</td>
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<tr>
<td>12-13 credits from</td>
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</tr>
<tr>
<td>ANAT 425</td>
<td>Human Embryology and Histology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Endocrinology</td>
<td>3</td>
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<td>PHYS 413</td>
<td>Renal Physiology</td>
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<td>PHYS 414</td>
<td>Cardiovascular Physiology</td>
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</tr>
<tr>
<td>PHYS 420</td>
<td>Neuroscience</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12-13

Subtotal: 20-21
BIO 111 and one chemistry course are prerequisites to this program.

CERTIFICATE IN BIOTECHNOLOGY
20-26 credits
(See Certificates (p. 23))
TEACHER EDUCATION

Science Teaching Majors
(See Science, College of Sciences and Humanities (p. 160) for the teaching major in life science.)

CHEMISTRY

R. Sammelson, Chairperson
bsu.edu/chemistry

The Department of Chemistry offers a comprehensive major program approved by the American Chemical Society for the training of professional chemists; a biochemistry concentration for students who want to combine chemistry with a molecular-level study of biological systems; a departmental major for students who want to combine detailed study of chemistry with in-depth study of other subjects; and a teaching major in chemistry. Chemistry minor programs for prospective health scientists and others are available. Courses offered meet the needs of students in medical technology, biology, dietetics, natural resources, physics, and pre-dental, pre-engineering, pre-pharmacy, pre-medical, and other programs requiring a background in chemistry. A two-year curriculum leading to an associate degree in chemical technology is available for students who want to complete a less intense program of study in preparation for industrial employment as technicians. Faculty mentored student research opportunities are available and encouraged.

Associate Degree

ASSOCIATE IN SCIENCE—CHEMICAL TECHNOLOGY (AS)

60 CREDITS

General education, 23-27 credits
COMM 210 Fundamentals of Public Communication 3

ECON 201 Elementary Microeconomics 3
or
ECON 202 Elementary Macroeconomics 3

ENG 103 Rhetoric and Writing 3
ENG 104 Composing Research 3

6 credits from
TDPT 161 Introduction to Manufacturing Industries 3
or
other approved courses 6

PFW, 1 credit
Electives, 4-8 credits

Subtotal: 23-27

Chemistry concentration area, 33-37 credits
CHEM 111 General Chemistry 1 4
CHEM 112 General Chemistry 2 4
CHEM 225 Chemical Analysis 3
CHEM 234 Organic Chemistry 1 5
CHEM 235 Organic Chemistry 2 5
or
CHEM 231 Organic Chemistry for Molecular-Based Sciences: Part 1 3
CHEM 232 Organic Chemistry for Molecular-Based Sciences: Part 2 3
and
CHEM 241 Organic Chemistry Laboratory 1: Fundamental Techniques 1
CHEM 242 Organic Chemistry Laboratory 2: Synthesis and Characterization 1
CHEM 325 Instrumental Methods of Analysis 3

4 credits from CHEM electives (including CHEM 389, unless waived by advisor)
3-4 credits from
MATH 111 Pre-Calculus Algebra 3
MATH 112 Precalculus-Trigonometry 3
MATH 161 Applied Calculus 1 3
MATH 165 Calculus 1 4

4-5 credits from
PHYC 110 General Physics 1 4
or
PHYC 120 General Physics 1 5

Subtotal: 33-37

Students qualifying for exemption from ENG 103 or ENG 104 will receive credit for the course(s). ENG 101 and ENG 102 may be substituted for ENG 103.

Baccalaureate Degrees

Students will be guided by the outline of baccalaureate degrees (p. 20), the University Core Curriculum (p. 26), and the concentration areas listed below.

MAJOR IN CHEMISTRY (BA/BS)
### 51-70 Credits

American Chemical Society (ACS) concentration, 61-63 credits

This program prepares students for graduate study or careers in chemistry. Upon completion of the program, students are certified to the American Chemical Society (ACS) as having fulfilled the course of study described in “Objectives and Guidelines for Undergraduate Programs in Chemistry,” issued by the ACS Committee on Professional Training.

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
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<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 225</td>
<td>Chemical Analysis</td>
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<tr>
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<td>CHEM 242</td>
<td>Organic Chemistry Laboratory 2: Synthesis and Characterization</td>
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<td>CHEM 400</td>
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<td>CHEM 454</td>
<td>Inorganic Chemistry and Organometallic Synthesis Laboratory</td>
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<td>CHEM 463</td>
<td>Principles of Biochemistry 1</td>
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<td>1 credit from 300- or 400-level approved CHEM course</td>
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**Subtotal:** 45 credits

### 8-10 Additional Credits

Additional credits in CHEM 470, Independent Study and Research, are recommended. Students who take CHEM 230, 231 and 241 must have completed CHEM 112 with a grade of C or better; students who take CHEM 232 and 242 must have completed CHEM 231 with a grade of C- or better; students who take CHEM 360 and 361 must have completed CHEM 230 or 232 with a grade of C- or better; students who take CHEM 430 must have completed both CHEM 232 and 242 with a grade of C- or better.

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<tr>
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<td>CHEM 242</td>
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<td>CHEM 450</td>
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<td>CHEM 454</td>
<td>Inorganic Chemistry and Organometallic Synthesis Laboratory</td>
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<td>CHEM 463</td>
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**Subtotal:** 45 credits

### Other Requirements

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<td>MATH 166</td>
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<td>PHYC 112</td>
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**Subtotal:** 45 credits

### Other Requirements

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Additional credits in CHEM 470, Independent Study and Research, are recommended. Students who take CHEM 230, 231 and 241 must have completed CHEM 112 with a grade of C or better; students who take CHEM 232 and 242 must have completed CHEM 231 with a grade of C- or better; students who take CHEM 360 and 361 must have completed CHEM 230 or 232 with a grade of C- or better; students who take CHEM 430 must have completed both CHEM 232 and 242 with a grade of C- or better.

Biochemistry concentration, 68-70 credits

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<td>Organic Chemistry for Molecular-Based Sciences: Part 1</td>
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Other requirements

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**Teacher Education**

Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for descriptions of these courses and other professional requirements of the teacher education program.

**MINOR IN CHEMISTRY**

**22 CREDITS**

High school mathematics equivalent to MATH 108 is required.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CHEM 231</td>
<td>Organic Chemistry for Molecular-Based Sciences: Part 1</td>
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**Subtotal: 22**

**TEACHING MAJOR IN CHEMISTRY (BA/BS)**

**88-90 CREDITS**

Required Courses

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<td>CHEM 444</td>
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<td>3 credits from HONR 499 or approved CHEM Internship (369) or Research (470)</td>
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<td>or</td>
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</tr>
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**Subtotal: 8-10**

**SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM**

Professional education sequence, 39 credits

<table>
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<td>Social, Historical, and Philosophical Foundations of Education</td>
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<td>EDJH 385</td>
<td>Principles of Teaching in the Middle School</td>
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<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
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<td>EDPS 251</td>
<td>Human Growth and Development for Secondary Education</td>
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<td>EDPS 390</td>
<td>Educational Psychology</td>
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<td>EDSE 380</td>
<td>Principles of Teaching in the Secondary School</td>
<td>3</td>
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<tr>
<td>SCI 150</td>
<td>Introduction to Teaching Science in Secondary Schools</td>
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<td>SCI 295</td>
<td>Introduction to the Teaching of Science</td>
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<td>SCI 396</td>
<td>Using Science Methods and Materials</td>
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</table>

**Subtotal: 39**

See Professional Education Assessment/Decision Points (p. 234) for additional information.

**COMPUTER SCIENCE**

P. Buis, Chairperson
bsu.edu/cs

Computer science is the study of information and computation and their application in computer systems. Computer science majors start by learning the fundamentals of programming, algorithms, and discrete mathematics, while upper-level courses focus on specializations such as software engineering, programming languages, theory, web and mobile platform development, operating systems, networking, and databases. The ubiquitous application of computer science necessitates that majors be broadly educated and have excellent analytical and communication skills.

The department also offers two minors:

- The computer science minor allows students with other majors to learn the foundations of traditional computer science.
- The computer security minor explores modern issues in computer and information security such as digital forensics and encryption.

Computer Science majors taking classes at the 200-level and above will be required to own a laptop computer and may be expected to bring the laptop to such classes. Computer ownership for students in 100-level courses is encouraged but not required. Some classes will require running software under Windows, but a MacIntosh with Parallels will work well for such software.

**MAJOR IN COMPUTER SCIENCE (BA/BS)**

**63-68 CREDITS**

Required Courses

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<td>Advanced Programming</td>
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<tr>
<td>CS 224</td>
<td>Design and Analysis of Algorithms</td>
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<td>Computer Organization and Architecture</td>
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<tr>
<td>CS 239</td>
<td>Social and Professional Issues</td>
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<td>CS 380</td>
<td>Theory of Computation 1</td>
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<td>Course Code</td>
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<td>CS 315</td>
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<td>Multitier Web Architectures</td>
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<td>CS 421</td>
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<td>CS 439</td>
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**Subtotal: 12**

**MINOR IN COMPUTER SCIENCE**

**17 CREDITS**

Requirements List

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<td>Computer Organization and Architecture</td>
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<tr>
<td>CS 418</td>
<td>Database Design</td>
<td>3</td>
</tr>
<tr>
<td>CS 419</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 420</td>
<td>Multitier Web Architectures</td>
<td>3</td>
</tr>
<tr>
<td>CS 421</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>CS 422</td>
<td>Advanced Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 424</td>
<td>Design and Analysis of Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CS 426</td>
<td>Image Processing</td>
<td>3</td>
</tr>
<tr>
<td>CS 430</td>
<td>Software Production Studio</td>
<td>3 TO</td>
</tr>
<tr>
<td>CS 439</td>
<td>Current Topics Seminar in Computer Science</td>
<td>3 TO</td>
</tr>
</tbody>
</table>

**Subtotal: 8**

9 credits from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CS 120</td>
<td>Computer Science 1: Programming Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CS 121</td>
<td>Computer Science 2: Data Structures and Objects</td>
<td>4</td>
</tr>
<tr>
<td>CS 222</td>
<td>Advanced Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 224</td>
<td>Design and Analysis of Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CS 230</td>
<td>Computer Organization and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>CS 315</td>
<td>Game Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 380</td>
<td>Theory of Computation 1</td>
<td>3</td>
</tr>
<tr>
<td>CS 410</td>
<td>Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 411</td>
<td>Mobile Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CS 416</td>
<td>Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td>CS 418</td>
<td>Database Design</td>
<td>3</td>
</tr>
<tr>
<td>CS 419</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 420</td>
<td>Multitier Web Architectures</td>
<td>3</td>
</tr>
<tr>
<td>CS 421</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>CS 422</td>
<td>Advanced Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 424</td>
<td>Design and Analysis of Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CS 426</td>
<td>Image Processing</td>
<td>3</td>
</tr>
<tr>
<td>CS 430</td>
<td>Software Production Studio</td>
<td>3 TO</td>
</tr>
<tr>
<td>CS 439</td>
<td>Current Topics Seminar in Computer Science</td>
<td>3 TO</td>
</tr>
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</table>

**Subtotal: 3-5**

Electives, 12 credits from

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<th>Credits</th>
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<tbody>
<tr>
<td>CS 315</td>
<td>Game Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 369</td>
<td>Professional Experience 1</td>
<td>1 TO</td>
</tr>
<tr>
<td>CS 410</td>
<td>Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 411</td>
<td>Mobile Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CS 420</td>
<td>Multitier Web Architectures</td>
<td>3</td>
</tr>
<tr>
<td>CS 421</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>CS 422</td>
<td>Advanced Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 424</td>
<td>Design and Analysis of Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CS 426</td>
<td>Image Processing</td>
<td>3</td>
</tr>
<tr>
<td>CS 430</td>
<td>Software Production Studio</td>
<td>3 TO</td>
</tr>
<tr>
<td>CS 439</td>
<td>Current Topics Seminar in Computer Science</td>
<td>3 TO</td>
</tr>
</tbody>
</table>

**Subtotal: 9-12**

3-5 credits from lab science:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Earth, Life, and Time</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 110</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 120</td>
<td>General Physics 1</td>
<td>5</td>
</tr>
</tbody>
</table>

**Subtotal: 9-12**
Computer Science 6
CS 445 Human-Computer Interaction 3
CS 446 System Administration 3
CS 447 Network Security 3
CS 455 Data Mining 3
CS 456 Image Processing 3
CS 490 Software Production Studio 3 TO 6

Subtotal: 9

No more than 8 transfer credits are accepted in the minor, and the minor is not open to majors in computer science or minors in computer security. CS 120 requires MATH 108 or Math Placement.

Subtotal: 17

No more than 8 transfer credits are accepted in the minor, and the minor is not open to majors in computer science.

MINOR IN COMPUTER SECURITY
18-19 CREDITS

Required Courses
CS 110 Introduction to Computer Science and Web Programming 3
or
CS 120 Computer Science 1: Programming Fundamentals 4
CS 200 Computers and Society 3
CS 203 Introduction to Computer Security 3
CS 249 Forensics 3
CS 416 Computer Networks 3
or
CT 210 Fundamentals of Network Design 3
CS 446 System Administration 3

Subtotal: 18-19

Minor in Computer Security is not open to students with a Major in Computer Science or a Minor in Digital Forensics.

CRIMINAL JUSTICE AND CRIMINOLOGY

M. P. Brown, Chairperson
bsu.edu/cjc

The Department of Criminal Justice and Criminology offers a variety of courses that help students understand the dimensions and causes of crime and delinquency and the theories of crime prevention and control. Courses examine the structure and philosophy of the American criminal justice system; the operation of criminal courts at the local, state, and federal levels; techniques and theories of law enforcement; and the philosophies and practices of various correctional programs. Students are prepared for entry-level professional positions in the criminal justice system as well as for graduate study in related subjects.

Associate Degree

ASSOCIATE IN ARTS—CRIMINAL JUSTICE AND CRIMINOLOGY (AA)
60 CREDITS

General education, 36 credits
ENG 103 Rhetoric and Writing 3
ENG 104 Composing Research 3
HIST 150 The West in the World 3
MATH 125 Quantitative Reasoning 3

Fine Arts elective
One course from:
AHS 100 Introduction to Art 3
MUHI 100 Introduction to Music 3
THEA 100 Introduction to Theatre 3

Subtotal: 3

Natural Science elective
One course from:
BIO 100 Biology for a Modern Society 3
CHEM 100 People and Chemistry 3
GEOG 101 Earth, Sea, and Sky: A Geographic View 3
GEOL 101 Planet Earth's Geological Environment 3
HSC 160 Fundamentals of Human Health 3
NREM 101 Environment and Society 3
PHYC 100 Conceptual Physics 3

Subtotal: 3

Humanities elective
One course from:
ANTH 111 Anthropology of Everyday Life 3
CC 101 Word Origins and Vocabulary Development 3
CC 105 Introduction to the Classical World 3
ENG 206 Reading Literature 3
GEOG 121 Geography of the Cultural Environment 3
HIST 201 American History, 1492-1876 3
Baccalaureate Degrees
Students will be guided by the outline of baccalaureate degrees (p. 20), the University Core Curriculum (p. 26), and the concentration areas listed below.

MAJOR IN CRIMINAL JUSTICE AND CRIMINOLOGY (BA/BS)

48 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJC 101</td>
<td>Introduction to American Criminal Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CJC 102</td>
<td>Introduction to Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CJC 211</td>
<td>Race, Gender, and Crime</td>
<td>3</td>
</tr>
<tr>
<td>CJC 220</td>
<td>Research Methods in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJC 229</td>
<td>Decision-Making and Ethics in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJC 251</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJC 301</td>
<td>Evaluation Research in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJC 495</td>
<td>Capstone in Criminal Justice</td>
<td>3</td>
</tr>
</tbody>
</table>

24 credits from electives in CJC

Subtotal: 48

For those not taking the internship, a series of directed electives in CJC or related fields will be recommended. Majors and minors in criminal justice and criminology are not permitted to enroll in the Certificate in Corrections.

MINOR IN CRIMINAL JUSTICE AND CRIMINOLOGY

21 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJC 102</td>
<td>Introduction to Criminology</td>
<td>3</td>
</tr>
</tbody>
</table>

15 credits of electives in CJC

Subtotal: 15

Not open to CJC majors.

Subtotal: 21

MINOR IN DIGITAL FORENSICS

24 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJC 102</td>
<td>Introduction to Criminology</td>
<td>3</td>
</tr>
</tbody>
</table>
CJC 230  Introduction to Policing  3
CJC 251  Criminal Law  3
CJC 350  Criminal Evidence and Procedure  3
CS 110  Introduction to Computer Science and Web Programming  3
CS 203  Introduction to Computer Security  3
CS 249  Forensics  3
GEOG 265  Introduction to Geographic Information Systems  3

Subtotal: 24

Not open to computer security minors.

ENGLISH
P. Collier, Chairperson
bsu.edu/english

The English Department offers directed majors and minors that allow students to develop advanced intellectual and professional skills in writing, in analytical thinking, and in creative expression. With courses in literature, linguistics and TESOL (Teaching English to Speakers of Other Languages), creative writing, rhetoric and writing, and English education, English studies offers diverse gateways into the study of language. American, British, and world literature courses enable students to read and interpret works of literature with a greater understanding of their cultural, aesthetic and philosophical contexts. Linguistics and Global Communications offer an understanding of how languages are structured and how languages are used in communicative and interactional contexts. TESOL courses prepare students to teach those for whom English is a new language. Creative writing courses offer students the opportunity to sharpen their writing and creative thinking skills through the study of poetry, fiction, creative nonfiction, and screenwriting. Rhetoric and writing courses help students grow as writers and understand how writing contributes to lifelong learning and professional success. English education courses prepare students for the challenges and rewards of teaching in secondary schools. Each major has its own unique gateway class, and all students take a required capstone course, ENG 444, Senior Seminar. The Department of English offers a Bachelor of Arts degree for all majors, except for the English/Language Arts teaching major, which may be awarded either as a Bachelor of Arts or a Bachelor of Science. We also offer minors in creative writing, film/screenwriting, linguistics and global communication, literature, and professional writing and emerging media, and coursework for an add-on license in English as a Second Language for teachers. The lowest acceptable grade in a course for credit toward any major or minor in English is C. In addition, for graduation with the English/Language Arts teaching major, the minimum overall grade-point average (GPA) is 2.5.

For information about the related minors in European studies and women’s and gender studies, see Interdepartmental Programs (p. 39).

Regulations for University Core Curriculum: English Grade Requirements
Students must earn grades of C or better to fulfill University Core Curriculum requirements in ENG 101, 102, 103, 104, and 114.

Time Limitations
Students must complete the University Core Curriculum requirements in English before completing 63 semester credits. Any exception to this regulation must be approved by the chairperson of the English department.

Course Withdrawal
Students may withdraw only once from any of the following composition courses: ENG 101, 102, 103, 104, 114. Any exception to this regulation must be approved by the chairperson of the English department.

English/Language Arts teaching majors may apply two courses to both a major and minor in English. All other students who major and minor in English may apply only one course to both the major and the minor. Students who complete two majors in English may only count ENG 444 and two additional courses towards both majors. Students who complete no English major but two minors may apply only one course to both minors.

MAJOR IN ENGLISH (BA)
36 credits

APPLIED LINGUISTICS, 36 CREDITS
This program is designed to provide a foundation in the structure of language and its role in culture and communication. It is designed for students seeking careers in global settings, including teaching English abroad, as well as graduate studies in linguistics and related fields. Four semesters (or the equivalent) of a modern or classical language at the college level are required.

Required courses, 18 credits
ENG 220  Language and Society  3
ENG 320  Introduction to Linguistic Science  3
ENG 321  English Linguistics  3
ENGLISH STUDIES, 36 CREDITS
This program is designed to provide a foundation in the full range of subjects within English studies: literature, rhetoric, writing, linguistics, and creative writing. It is designed for students seeking a broad liberal education but not necessarily planning to pursue graduate studies in English. Four semesters (or the equivalent) of a modern or classical language at the college level are required.

Required Courses

ENG 210 Introduction to Rhetoric and Writing 3
ENG 220 Language and Society 3
ENG 230 Reading and Writing about Literature 3
ENG 285 Introduction to Creative Writing 3
ENG 444 Senior Seminar 3

3 credits from Creative writing course

Subtotal: 3

3 credits from Linguistics course

Subtotal: 3

3 credits from Literature course

Subtotal: 3

3 credits from Rhetoric/Writing course

Subtotal: 3

9 credits of English electives from courses numbered 300 or above

Subtotal: 9

Electives may not include WPP 392, WPP 393, or any course specially designed for teacher preparation: ENG 150, ENG 350, ENG 395. May include only 3 credits of ENG 369.

Subtotal: 36

CREATIVE WRITING, 36 CREDITS
This program is designed to equip students with the writing and creative thinking skills necessary for graduate study and a variety of writing-intensive careers. Courses in fiction, poetry, screenwriting, creative nonfiction, literature, service learning, and literary editing offer students a balanced liberal and professional education. Four semesters (or the equivalent) of a modern or classical language at the college level are required.

Required Courses

ENG 230 Reading and Writing about 3
ENG 285  Introduction to Creative Writing  3
ENG 405  Special Topics in Creative Writing  3
ENG 444  Senior Seminar  3

15 credits from creative writing classes, including at least 6 credits from courses numbered 406 and above.

ENG 306  Creative Nonfiction Writing  3
ENG 307  Fiction Writing  3
ENG 308  Poetry Writing  3
ENG 310  Screenwriting  3
ENG 406  Advanced Creative Nonfiction Writing  3
ENG 407  Advanced Fiction Writing  3
ENG 408  Advanced Poetry Writing  3
ENG 409  Creative Writing in the Community  3
ENG 410  Advanced Screenwriting  3
ENG 489  Practicum in Literary Editing and Publishing  3

Subtotal: 15

3 credits from literature courses numbered 300-399

Subtotal: 3

3 credits from literature courses numbered 400-499

Subtotal: 3

3 credits from English course numbered 205 or higher, excluding creative writing courses, ENG 206, and any course specially designed for teacher preparation: ENG 150, ENG 350, ENG 395.

Subtotal: 3

LITERATURE, 36 CREDITS

This program is designed to provide a foundation in the methods of and contexts for literary study, to sharpen students' analytical and communicative skills, and to prepare students for a variety of academic and professional opportunities. Four semesters (or the equivalent) of a modern or classical language at the college level are required.

Required Courses

ENG 230  Reading and Writing about Literature  3
ENG 444  Senior Seminar  3

Distribution requirements
3 courses from British literature (one pre-1800 required)
ENG 260  British Literature 1: The Beginnings to 1780  3

ENG 280  British Literature 2: 1780 to the Present  3
ENG 362  Medieval British Literature  3
ENG 363  Renaissance and Seventeenth-Century British Literature  3
ENG 364  Restoration and Eighteenth-Century British Literature  3
ENG 365  Nineteenth-Century British Literature  3
ENG 366  British Literature 1900-1945  3
ENG 367  Contemporary British Literature  3
or appropriate ENG 400-level offerings  9

Subtotal: 9

3 courses from American literature (one pre-1900 required)
ENG 240  American Literature 1: The Beginnings to 1860  3
ENG 250  American Literature 2: 1860 to the Present  3
ENG 345  Early American Literature  3
ENG 346  Nineteenth-Century American Literature  3
ENG 347  Twentieth-Century American Literature  3
ENG 351  Twenty-First-Century American Literature  3
or appropriate ENG 400-level offerings  9

Subtotal: 9

1 course from diverse literature
ENG 490  Literature and Gender  3
ENG 491  Literature of African-American Traditions  3
ENG 492  Native American Literature  3
ENG 493  American Ethnic Literature  3
ENG 494  Queer Literature/Queer Theory  3
ENG 498  Studies in Global Literature  3

Subtotal: 3

1 course at the ENG 400-level
ENG 400  Special Topics in English  3
ENG 402  Cultural Studies  3
ENG 421  Studies in Literary History  3
ENG 422  Studies: Authors  3
ENG 423  Studies in Drama  3
ENG 424  Genre Studies  3

Subtotal: 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 425</td>
<td>Film Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 464</td>
<td>Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENG 496</td>
<td>Literary and Critical Theory</td>
<td>3</td>
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<tr>
<td>ENG 497</td>
<td>Studies: Literature in Translation</td>
<td>3</td>
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</table>

**Electives**

Two elective courses in English numbered 205 and above. May not include ENG 206 or any course specially designed for teacher preparation: ENG 150, ENG 350, ENG 395. May include 3 credits of ENG 369.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 3</td>
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</table>

**RHETORIC AND WRITING, 36 CREDITS**

This program introduces students to rhetoric as the theory and practice of discourse; it is especially relevant for students planning further academic or professional studies. Four semesters (or the equivalent) of a modern or classical language at the college level are required.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 210</td>
<td>Introduction to Rhetoric and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 213</td>
<td>Introduction to Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 231</td>
<td>Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 303</td>
<td>History of Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>ENG 335</td>
<td>Writing and Reading Public Discourse</td>
<td>3</td>
</tr>
<tr>
<td>ENG 435</td>
<td>Issues in Rhetoric and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 444</td>
<td>Senior Seminar</td>
<td>3</td>
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<tr>
<td>ENG 104 or ENG 114</td>
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**Electives**

Two elective courses in English numbered 205 and above. May not include ENG 206, or any course specifically designed for teacher preparation: ENG 150, ENG 350, and ENG 395.

<table>
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</table>

**MINOR IN CREATIVE WRITING**

**18 CREDITS**

This program offers a foundation in writing and creative thinking skills designed to complement other university majors and minors.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 206</td>
<td>Reading Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 285</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
<tr>
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</tbody>
</table>

**MINOR IN FILM/SCREENWRITING**

**18 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 285</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 310</td>
<td>Screenwriting</td>
<td>3</td>
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<tr>
<td>TCOM 363</td>
<td>Film Genres</td>
<td>3</td>
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<td>TCOM 360</td>
<td>World Film History 1</td>
<td>3</td>
</tr>
<tr>
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</table>

**Electives**

Three credits from ENG 410 or ENG 425 or 3 credits from the listed courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 3</td>
<td></td>
</tr>
</tbody>
</table>
3 credits from
TCOM 365  History of Documentary Film  3
TCOM 465  Seminar in Film Theory  3
TCOM 360  World Film History 1  3
or
TCOM 361  World Film History 2  3

Subtotal: 3

Subtotal: 18
Minors in creative writing may count only ENG 285 in both minors. Majors in the TCOM digital production concentration may count only ENG 285 in both the major and minor.
The Minor in Film/Screenwriting is not open to TCOM majors in film and media studies concentration.

MINOR IN LINGUISTICS AND GLOBAL COMMUNICATION
15 CREDITS
This program introduces students to the scientific study of human language, its structure, its diversity, and its communicative properties. The program focuses on understanding how languages change, how they are used by communities, and how they are acquired.

Required Courses
- ENG 220  Language and Society  3
- ENG 320  Introduction to Linguistic Science  3

Subtotal: 6

Concentration 1: Linguistics
- ENG 321  English Linguistics  3

6 credits from
- CH 337  Chinese Linguistics  3
- ENG 322  Language and Cross-Cultural Communication  3
- ENG 323  Discourse Structure and Strategies  3
- ENG 328  Language and Gender  3
- ENG 332  Linguistic Phonetics and Phonology  3
- ENG 400  Special Topics in English  3
- FR 337  Phonetics  3
- GER 337  Phonetics  3
- SP 337  Spanish Phonetics and Phonology: Theory and Application  3
- SP 340  Survey in Spanish Linguistics  3
- SPAA 260  Speech Acoustics  3
- SPAA 270  Language Development  3

Concentration 2: Global Communication
- ENG 322  Language and Cross-Cultural Communication  3

6 credits from
- ANTH 111  Anthropology of Everyday Life  3
- COMM 290  Intercultural Communication  3
- ENG 323  Discourse Structure and Strategies  3
- ENG 328  Language and Gender  3
- POLS 293  International Relations  3
- SOC 328  Globalization and the Social World  3

Subtotal: 15
Four semesters or the equivalent in one or more modern or classical languages other than a student’s native language are recommended for Concentration 1: Linguistics. Two semesters or the equivalent in one or more modern or classical languages other than a student’s native language are recommended for Concentration 2: Global Communication.

MINOR IN LITERATURE
15 CREDITS
This program is designed to enhance students’ ability to read a variety of texts with greater understanding in conjunction with other university majors and minors.

Required Courses
- ENG 206  Reading Literature  3
or
- ENG 230  Reading and Writing about Literature  3

12 credits of additional literature courses numbered 205 and above.
Must include at least one 300-level and one 400-level course. Must include at least one course in American literature and one course in British literature.

Subtotal: 12

Subtotal: 15

MINOR IN PROFESSIONAL WRITING AND EMERGING MEDIA
15 CREDITS
This program provides students with understanding and practice in the genres and conventions of effective professional writing and communication in both traditional and emerging media environments.

Required Courses
- ENG 213  Introduction to Digital Literacies  3
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 231</td>
<td>Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 329</td>
<td>Editing and Style</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ENG 489</td>
<td>Practicum in Literary Editing and Publishing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 335</td>
<td>Writing and Reading Public Discourse</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ENG 430</td>
<td>Document Design and Visual Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>ENG 431</td>
<td>Rhetoric, Writing, and Emerging Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 15

ENG 306, ENG 307, ENG 308, or ENG 310 should be taken to satisfy the prerequisite for ENG 489, if elected. ENG 104 or ENG 114 should be taken to satisfy the prerequisite for ENG 430, if elected.

**MINOR IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)**

**15 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 334</td>
<td>English Linguistics for Educators</td>
<td>3</td>
</tr>
<tr>
<td>ENG 436</td>
<td>Theory and Research in Teaching</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>English to Speakers of Other Languages</td>
<td></td>
</tr>
<tr>
<td>ENG 437</td>
<td>Methods and Materials in Teaching</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>English to Speakers of Other Languages</td>
<td></td>
</tr>
<tr>
<td>Directed electives, 6 credits from the following courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 220</td>
<td>Language and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENG 321</td>
<td>English Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 322</td>
<td>Language and Cross-Cultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENG 332</td>
<td>Linguistic Phonetics and Phonology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 438</td>
<td>TESOL Curriculum Development and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ENG 457</td>
<td>Practicum in Teaching English to Speakers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>of Other Languages</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal: 6

This minor does not lead to a license. Four semesters or the equivalent in one or more modern or classical languages other than one’s native language are recommended. This minor is not open to students pursuing a K-12 license.

**Teacher Education**

Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for descriptions of these courses and other professional requirements of the teacher education program.

The English/Language Arts teaching major is designed to prepare students for teaching effectively in middle and high schools. Students will complete a core of courses in English and communication studies so as to meet performance standards for licensure. In addition, each student will select a concentration area (English or communication studies) to provide greater depth of content knowledge in the student’s area of teaching interest. Students must also complete content methods courses that will provide pedagogical knowledge and fulfill other professional requirements of the teacher education program. Students’ progress through the program will be monitored, and students must meet prescribed levels of performance at various checkpoints as listed in the Unit Assessment System in order to continue their enrollment in teacher education.

**TEACHING MAJOR IN ENGLISH/LANGUAGE ARTS (BA/BS)**

**87 CREDITS**

Core requirements, 36 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 205</td>
<td>World Literature</td>
<td>3</td>
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<tr>
<td>ENG 213</td>
<td>Introduction to Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 220</td>
<td>Language and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENG 230</td>
<td>Reading and Writing about Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 305</td>
<td>World Literature</td>
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<tr>
<td>ENG 307</td>
<td>Introduction to Digital Literacies</td>
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<tr>
<td>ENG 308</td>
<td>Language and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENG 414</td>
<td>Young Adult Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 444</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ENG 310</td>
<td>Practical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 15
One class in American Literature
Choose from:
Group A: Before 1900:
ENG 240  American Literature 1: The Beginnings to 1860  3
ENG 345  Early American Literature  3
ENG 346  Nineteenth-Century American Literature  3
or
Group B: 1900-present:
ENG 250  American Literature 2: 1860 to the Present  3
ENG 347  Twentieth-Century American Literature  3
ENG 351  Twenty-First-Century American Literature  3

Subtotal: 3
Take the following
COMM 220  Argumentation and Debate  3
COMM 240  Introduction to Interpersonal Communication  3
or
COMM 290  Intercultural Communication  3

Subtotal: 3
Complete one of the following concentrations
English concentration, 12 credits
ENG 285  Introduction to Creative Writing  3
One class in American Literature
Choose from Group A if you took Group B in the core or choose from Group B if you took Group A in the core.

Subtotal: 3
One class in British Literature
Choose from:
ENG 280  British Literature 2: 1780 to the Present  3
ENG 362  Medieval British Literature  3
ENG 363  Renaissance and Seventeenth-Century British Literature  3
ENG 364  Restoration and Eighteenth-Century British Literature  3
ENG 365  Nineteenth-Century British Literature  3
ENG 366  British Literature 1900-1945  3
ENG 367  Contemporary British Literature  3

Subtotal: 3
ENG 464  Shakespeare  3

Subtotal: 3
3 credits from
Diverse literature electives 400 and above
Choose from
ENG 490  Literature and Gender  3
ENG 491  Literature of African-American Traditions  3
ENG 492  Native American Literature  3
ENG 493  American Ethnic Literature  3
ENG 494  Queer Literature/Queer Theory  3
ENG 498  Studies in Global Literature  3

Subtotal: 48
Communication studies concentration, 12 credits
COMM 240  Introduction to Interpersonal Communication  3
or
COMM 290  Intercultural Communication  3
COMM 375  Presentational Communication  3
COMM 475  Coaching and Directing Secondary School Forensics  3
COMM 320  Persuasion  3
or
COMM 330  Small Group Communication  3
or
COMM 370  Nonverbal Communication in Human Interaction  3

Subtotal: 48
Choose COMM 240 if you took COMM 290 in the core or choose COMM 290 if you took COMM 240 in the core.

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM
Professional education sequence, 39 credits
EDFO 420  Social, Historical, and Philosophical Foundations of Education  3
EDJH 385  Principles of Teaching in the Middle School  3
EDMU 205  Introduction to Multicultural Education  3
EDPS 251  Human Growth and Development for Secondary Education  3
EDPS 390  Educational Psychology  3
EDSE 380 Principles of Teaching in the Secondary School 3
ENG 150 Introduction to Teaching English Language Arts in Secondary Schools 3
ENG 350 Teaching Writing in Secondary Schools 3
ENG 395 Teaching Literature and Language in Secondary Schools 3
Student teaching 12

Subtotal: 39

Eng 150 Introduction to Teaching English Language Arts in Secondary Schools 3
ENG 350 Teaching Writing in Secondary Schools 3
ENG 395 Teaching Literature and Language in Secondary Schools 3

Subtotal: 87

See Professional Education Assessment/Decision Points (p. 234) for additional information.

LICENSE AREA IN ENGLISH AS A NEW LANGUAGE
15 CREDITS

Open only to candidates who currently hold or are pursuing a K-12 teaching license. The license in English as a new language will be granted when the following criteria are met:

- All requirements for an elementary or subject area teaching license.
- Completion of the professional education courses with a 2.5 minimum grade-point average.
- Completion of the following English as a new language courses with a 2.5 minimum grade-point average.

Decision Point 2—Students must meet with an English as a New Language (ENL) advisor to confirm the following:

- ENL license area portfolio in progress with artifacts and assessment rubrics from the above classes.
- Students may enroll in ENG 436 prior to completing decision point 2, but may not enroll in ENG 437, ENG 438, or ENG 457 before that time.

Decision Point 3—Students must meet with an ENL advisor to confirm the following:

- Completion of remaining required courses with a grade-point average of 2.5 or better: ENG 436, ENG 437, ENG 438, and ENG 457.
- The ENL license portfolio must include evidence of the following:
  - artifacts with attached rubrics from ENG 436, ENG 437, ENG 438, and ENG 457
  - All student work included in the portfolio must have a grade-point average of 2.5 or better.

Required Courses

ENG 334 English Linguistics for Educators 3
ENG 436 Theory and Research in Teaching 3

Subtotal: 15

ENVIRONMENT, GEOLOGY, AND NATURAL RESOURCES

T. Carter, Chairperson

The Department of Environment, Geology and Natural Resources is dedicated to studying, exploring and managing our natural world. Our programs offer students the opportunity to become involved in shaping our futures. We prepare students for various career tracks that are all related to the environment and the wise use of our natural resources. Our goal is to enable our students to help lead the world moving forward in a sustainable way that meets the needs of society.

The department offers 4 majors: 1) major in geology, 2) major in environmental geoscience, 3) major in natural resources and environmental management, and 4) teaching major in earth/space science education. We also offer 7 minors that help students in other majors gain specialized knowledge about the environment, geological sciences, natural resources, and environmental management.

The major in geology provides students with classic geologic training and involves a strong background in math and science and the applications of these fields to geology. The major in environmental geoscience provides students with a comprehensive overview of interacting earth systems including lithosphere, hydrosphere, and atmosphere, as well as understanding the evolution of earth’s physical and biological systems through time. Both of these majors prepare students for geological careers in industry, environmental consulting and government agencies, and for graduate study that leads to research, teaching, management, and many other positions in industry, government, and education.

The major in natural resources and environmental management has two different concentrations: Natural Resources and Environmental Management. Both have a common set of required courses and are designed to give students expertise in the scientific understanding of physical, biological, social, and political aspects of natural and managed systems. The natural resources concentration provides students with a strong background in environmental interpretation, land management, environmental policy, and the application of environmental...
practices that promote resource sustainability. The environmental management concentration offers students opportunities to develop analytical skills in laboratory settings related to pollution control, sampling air, land, and water systems for contamination, and best practices for environmental remediation. The teaching major in earth/space science education prepares students for teaching at the middle and high school levels.

MAJOR IN ENVIRONMENTAL GEOSCIENCE (BA/BS)

68 CREDITS

Students are expected to have completed mathematics through MATH 112 or their high school equivalent as approved by the primary departmental advisor.

Core requirements, 56 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
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<tr>
<td>BIO 216</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 105</td>
<td>Laboratory in Physical Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Earth, Life, and Time</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 207</td>
<td>Environmental Geology - Geological/Geochemical Cycles</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 220</td>
<td>Earth Materials</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 240</td>
<td>Geomorphology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 308</td>
<td>Sedimentary Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 315</td>
<td>Structural Geology, Tectonics and Basic Field Methods</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 350</td>
<td>Physical Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 461</td>
<td>Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 181</td>
<td>Elementary Probability and Statistics</td>
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<tr>
<td>METC 230</td>
<td>Elementary Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>NREM 221</td>
<td>Soil Resources</td>
<td>3</td>
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</table>

Subtotal: 56

6 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOL 310</td>
<td>Igneous and Metamorphic Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 383</td>
<td>Field Geology</td>
<td>6</td>
</tr>
<tr>
<td>GEOL 409</td>
<td>Micropaleontology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 411</td>
<td>Advanced Igneous and Metamorphic Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 412</td>
<td>Sedimentary Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 413</td>
<td>Experimental Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 416</td>
<td>Geology of Hazards and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 420</td>
<td>Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 425</td>
<td>Geophysics</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 434</td>
<td>Applied Biostratigraphy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 435</td>
<td>Sequence Stratigraphy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 440</td>
<td>Karst Environments and Carbonate Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 462</td>
<td>Environmental Geology in the Field and Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 470</td>
<td>Groundwater Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 471</td>
<td>Volcanology and Volcanic Hazards</td>
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</tr>
<tr>
<td>GEOL 475</td>
<td>Glacial Geology</td>
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Subtotal: 6

68 credits from

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EMHS 350</td>
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<tr>
<td>GEOG 342</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>METC 331</td>
<td>Global Climatology</td>
<td>3</td>
</tr>
<tr>
<td>NREM 320</td>
<td>Wetland Characterization</td>
<td>3</td>
</tr>
<tr>
<td>NREM 324</td>
<td>Soil Classification and Interpretation</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 6

Recommended: 68

Recommended: CS 120 and one year of college chemistry or physics or both. Recommended majors and minors include anthropology, biology, business administration, chemistry, economics, modern languages and classics, geography, mathematics, natural resources, and physics.

MAJOR IN GEOLOGY (BA/BS)

68-70 CREDITS

Students are expected to have completed mathematics through MATH 112 or the high school equivalent as approved by the primary departmental advisor.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 1</td>
<td>4</td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological Environment</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------</td>
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</tr>
<tr>
<td>GEOL 105</td>
<td>Laboratory in Physical Geology</td>
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</tr>
<tr>
<td>GEOL 201</td>
<td>Earth, Life, and Time</td>
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</tr>
<tr>
<td>GEOL 207</td>
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</tr>
<tr>
<td>GEOL 220</td>
<td>Earth Materials</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 240</td>
<td>Geomorphology</td>
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<td>GEOL 290</td>
<td>Computer Applications in the Geosciences</td>
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<td>GEOL 308</td>
<td>Sedimentary Geology</td>
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<td>GEOL 310</td>
<td>Igneous and Metamorphic Petrology</td>
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<td>GEOL 315</td>
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**Subtotal:** 12

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<th>Course Title</th>
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<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
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</table>

**Subtotal:** 4-6

Skills in a modern foreign language are encouraged. Recommended minors include biology, chemistry, physics, computer science, economics, geography, mathematics, and natural resources.

**MAJOR IN NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT (BA/BS)**

**54-56 CREDITS**

Environmental Management (EM) concentration, 56 credits

Common core required courses, 26 credits

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>Undergraduate Seminar</td>
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<td>NREM 211</td>
<td>Water Resources</td>
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<td>NREM 221</td>
<td>Soil Resources</td>
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<td>NREM 241</td>
<td>Air Resources</td>
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One of the following

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<th>Course Title</th>
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<tbody>
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<td>NREM 331</td>
<td>Energy and Mineral Resources: Issues and Choices</td>
<td>3</td>
</tr>
<tr>
<td>NREM 405</td>
<td>Integrated Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>NREM 369</td>
<td>Professional Practice/Experiential Learning</td>
<td>1 TO</td>
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<tr>
<td>NREM 490</td>
<td>Community Engagement in Natural Resources and Environmental Management</td>
<td>3</td>
</tr>
</tbody>
</table>

or

Any Tier 3 course from another department 3

**Subtotal:** 26

Required courses from EM concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Principles of Biology 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 2</td>
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One of the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 313</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 230</td>
<td>Organic Chemistry for the Life</td>
<td>3</td>
</tr>
</tbody>
</table>
Sciences and Chemistry Laboratory 1: Fundamental Techniques 1
Electives, 18 credits from EM concentration
Hazardous Materials Health and Safety 3
Introduction to Emergency Management and Homeland Security 3
Science of WMDs and Technological Hazards 3
Arson Investigation 3
International Domestic Terrorism 3
WMD Awareness and Response 3
Professional Practice 1 TO 6
Special Topics 1 TO 6
Sustainable Agriculture 3
Wetland Characterization 3
Soil Classification and Interpretation 3
Wastewater Management 3
Water Quality Management 3
Soil Quality 3
Soil Conservation and Management 3
Air Quality Management 3
Solid and Hazardous Waste Management 3
Site Assessment and Remediation 3
Choose one of the following
Computer and Quantitative Applications 3
Applied Research Methods in Resource Management 3
Integrated Resource Management 3
Professional Practice/Experiential Learning 1 TO 3
Community Engagement in Natural Resources and Environmental Management 3
Any Tier 3 course from another department 3
Subtotal: 26
Principles of Biology 2 4
Introduction to Geographic Information Systems 3
Ecology 3
Ecological Issues in the 21st Century 3
American Environmental History 3
American Environmental History 3
International Natural Resources: Development and Conservation 3
Sustainable Agriculture 3
Human Dimensions of Global Change 3
Wetland Characterization 3
Soil Classification and Interpretation 3
Renewable Energy and Sustainable Technology 3
Outdoor Recreation and Society 3
Wastewater Management 3
Environmental Interpretation 3
NREM 395  Teaching Environmental Education  3
NREM 401  Forest Planning and Stewardship  3
NREM 415  Water Quality Management  3
NREM 422  Soil Quality  3
NREM 427  Soil Conservation and Management  3
NREM 473  Outdoor Recreation Planning and Administration  3
NREM 477  Wilderness and Society  3

Other relevant courses may substitute. See chairperson regarding approval.

Before enrolling in NREM 211, NREM 221, NREM 241, or NREM 286, students must have credit in MATH 108 or MATH 111 or MATH 112 or MATH 132 or MATH 161 or MATH 165 or have taken the math placement test and received permission from the instructor. Credit in MATH 125 can also count as a prerequisite for NREM 286. Core foundation courses (CHEM 111, NREM 101, NREM 201) must be completed before enrolling in NREM 221 or higher courses. Students in environmental management are encouraged to take CHEM 112 immediately following CHEM 111.

Subtotal: 26
Total Credit Hours: 54-56

MINOR IN EMERGENCY MANAGEMENT AND HOMELAND SECURITY
The academic minor in Emergency Management and Homeland Security is designed to provide students with a program of study which focuses on skills and practices of emergency planning and management associated with homeland security issues. These include natural disasters, chemical, biological and radiological incidents and acts of terrorism. This program provides a practical approach to the emergency management issues of preparedness, responses, recovery, and mitigation of natural and human-caused disasters.

24 CREDITS

Required Courses, 6 credits
EMHS 351  Introduction to Emergency Management and Homeland Security  3
EMHS 352  Science of WMDs and Technological Hazards  3

Electives, 18 credits from
EMHS 350  Hazardous Materials Health and Safety  3
EMHS 353  Arson Investigation  3
EMHS 355  International Domestic Terrorism  3
EMHS 389  WMD Awareness and Response  3
EMHS 469  Professional Practice  1 TO 6
EMHS 493  Special Topics  1 TO 6
GEOG 265  Introduction to Geographic Information Systems  3
HSC 250  Emergency Health Care  3
JOUR 261  Principles of Public Relations  3
METC 334  Atmospheric Hazards  3
METC 450  Mesoscale Meteorology  3
PLAN 439  Community Facilities Planning  3
POLS 345  National Defense Policy  3
POLS 494  Politics of Terrorism  3

Subtotal: 24
Other relevant courses may substitute. See Program Director regarding approval.

MINOR IN ENERGY
21 CREDITS

This minor gives students an interdisciplinary approach to the study of the development, use, and conservation of energy. Students may focus on solar and alternative energy systems, energy policy, economics, or planning. The minor complements majors in planning, business, industrial technology, and the life, physical, and earth sciences.

Required Courses
NREM 331  Energy and Mineral Resources: Issues and Choices  3
NREM 335  Renewable Energy and Sustainable Technology  3

3 credits from
GEOL 101  Planet Earth’s Geological Environment  3
NREM 101  Environment and Society  3
PHYC 100  Conceptual Physics  3

Subtotal: 3

12 credits from the following groups with at least one course from each:

Group 1
APHY 420  Solar Thermal Systems  3
APHY 422  Photovoltaics  3
GEOL 207  Environmental Geology - Geological/Geochemical Cycles  3
GEOL 435  Sequence Stratigraphy  3
NREM 241  Air Resources  3
NREM 346  Indoor Environmental Quality  3

Group 2
CM 252  Building Diagnostics  3
LA 471  Sustainable Land Systems  3
NREM 405  Integrated Resource Management  3
PLAN 431  Urban Transportation Planning  3
PLAN 433  Environmental Planning  3
PLAN 435  Energy Planning  3
TDPT 204  Energy Processing  3

Subtotal: 12

Advisor approval required for topic of CAP 498, NREM 497, or NREM 402 (maximum of 3 credits applicable). Students electing APHY 420 or NREM 405 are expected to meet the course prerequisites.

MINOR IN ENVIRONMENTAL GEOLOGY
21 CREDITS

Required Courses

GEOG 101  Earth, Sea, and Sky: A Geographic View  3
or
GEOL 101  Planet Earth's Geological Environment  3
GEOL 201  Earth, Life, and Time  3

GEOL 206  Oceans and Nations  3

9 credits from
GEOL 207  Environmental Geology - Geological/Geochemical Cycles  3
GEOL 240  Geomorphology  3
GEOL 350  Physical Hydrology  3
GEOL 420  Oceanography  3
GEOL 461  Hydrogeology  3
GEOL 470  Groundwater Geochemistry  3

Subtotal: 9

3 credits from
EMHS 350  Hazardous Materials Health and Safety  3
GEOG 265  Introduction to Geographic Information Systems  3
GEOG 342  Introduction to Remote Sensing  3
METC 331  Global Climatology  3
NREM 221  Soil Resources  3

Subtotal: 3

MINOR IN ENVIRONMENTAL MANAGEMENT
22 CREDITS

Required Courses
CHEM 111  General Chemistry 1  4
NREM 101  Environment and Society  3

15 credits from
EMHS 350  Hazardous Materials Health and Safety  3
EMHS 389  WMD Awareness and Response  3
NREM 211  Water Resources  3
NREM 221  Soil Resources  3
NREM 241  Air Resources  3
NREM 286  Computer and Quantitative Applications  3
NREM 307  Environmental Management in Developing Countries  3
NREM 309  Human Dimensions of Global Change  3
NREM 320  Wetland Characterization  3
NREM 324  Soil Classification and Interpretation  3
NREM 331  Energy and Mineral Resources: Issues and Choices  3

Subtotal: 21
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<th>Course Title</th>
<th>Credits</th>
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<td>NREM 335</td>
<td>Renewable Energy and Sustainable Technology</td>
<td>3</td>
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<td>NREM 346</td>
<td>Indoor Environmental Quality</td>
<td>3</td>
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<tr>
<td>NREM 347</td>
<td>Occupational/Industrial Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>NREM 369</td>
<td>Professional Practice/Experiential Learning</td>
<td>1 TO</td>
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<td>NREM 385</td>
<td>Wastewater Management</td>
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<td>NREM 402</td>
<td>Field Study</td>
<td>1 TO</td>
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<tr>
<td>NREM 415</td>
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<td>NREM 422</td>
<td>Soil Quality</td>
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<tr>
<td>NREM 487</td>
<td>Solid and Hazardous Waste Management</td>
<td>3</td>
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<td>NREM 488</td>
<td>Site Assessment and Remediation</td>
<td>3</td>
</tr>
<tr>
<td>NREM 497</td>
<td>Special Studies in Environmental and Natural Resource Sciences</td>
<td>1 TO</td>
</tr>
</tbody>
</table>

**Subtotal:** 15

Maximum of 3 credits in NREM 402 is applicable to the minor with permission of the department chairperson.

**MINOR IN GEOLOGY**

**18 CREDITS**

**Required Courses**

- GEOL 101 Planet Earth's Geological Environment 3
- GEOL 201 Earth, Life, and Time 3

12 credits from elective sequence approved by a geology faculty advisor (GEOL 206 not included)

**Subtotal:** 12

Specific elective sequences are recommended for particular majors such as various business, environmental planning, and science disciplines.

**MINOR IN INTERNATIONAL RESOURCE MANAGEMENT**

**21 CREDITS**

**Required Courses**

- NREM 101 Environment and Society 3
- or
- NREM 205 International Natural Resources: Development and Conservation 3

9 credits from

- NREM 307 Environmental Management in 3
- NREM 309 Developing Countries 3
- NREM 357 International Community Development 3

**Subtotal:** 9

9 credits from

- ANTH 111 Anthropology of Everyday Life 3
- ANTH 312 Ecological Dimensions of Culture 3
- ECON 279 Economic and Political Problems of Emerging Nations 3
- ENT 241 The Entrepreneurial Experience 3
- FIN 352 Global Finance 3
- GEOG 150 Global Geography 3
- GEOG 261 Introduction to Sustainable Tourism 3
- GEOG 262 Tourism Regions 3
- GEOG 351 Geography of Latin America and the Caribbean 3
- GEOG 354 Geography of Asia 3
- HIST 198 Studies in Non-Western Civilizations 3
- HIST 371 Tradition, Conflict, and Change in Modern Asia 3
- HIST 372 Africa Since 1500 3
- HIST 373 History of the Middle East 3
- INTB 265 Introduction to International Business 3
- NREM 304 Sustainable Agriculture 3
- NREM 331 Energy and Mineral Resources: Issues and Choices 3
- NREM 402 Field Study 1 TO 6
- PHIL 310 African Philosophy 3
- PLAN 100 Introduction to Urban Planning and Development 2
- PLAN 365 Economic Development Planning 3
- PLAN 433 Environmental Planning 3
- POLS 281 Economic and Political Problems of Emerging Nations 3
- RELS 160 Religion in Culture 3
- RELS 390 Buddhism 3
- SOC 320 Social Inequality 3
- SOC 328 Globalization and the Social World 3
Subtotal: 9

Students are strongly encouraged to complete two years or the equivalent of a modern foreign language. Only international field study courses count in minor (NREM 402 or equivalent).

MINOR IN NATURAL RESOURCES

21 CREDITS

Required Courses

NREM 101 Environment and Society 3

6 credits from

NREM 211 Water Resources 3
NREM 221 Soil Resources 3
NREM 331 Energy and Mineral Resources: Issues and Choices 3

Subtotal: 6

12 credits from

NREM 203 Decision Making in Natural Resource Management 3
NREM 204 American Environmental History 3
NREM 205 International Natural Resources: Development and Conservation 3
NREM 286 Computer and Quantitative Applications 3
NREM 304 Sustainable Agriculture 3
NREM 307 Environmental Management in Developing Countries 3
NREM 309 Human Dimensions of Global Change 3
NREM 320 Wetland Characterization 3
NREM 324 Soil Classification and Interpretation 3
NREM 335 Renewable Energy and Sustainable Technology 3
NREM 357 International Community Development 3
NREM 369 Professional Practice/Experiential Learning 1 TO 3
NREM 371 Outdoor Recreation and Society 3
NREM 392 Environmental Interpretation 3
NREM 395 Teaching Environmental Education 3
NREM 402 Field Study 1 TO

Subtotal: 12

Maximum of 3 credits in NREM 402 is applicable to the minor with permission of the department chairperson.

Teacher Education

Science Teaching Majors
(See Science, College of Sciences and Humanities for the Teaching Major in Earth/Space Science (p. 160).)

GEOGRAPHY

K. Turcotte, Chairperson
bsu.edu/geography

Geography as a science is distinguished by the spatial approach to understanding the mechanisms of the world’s physical and human environments and the linkages between them. Human geography is specifically concerned with the spatial aspects of human activities, while physical geography examines the spatial processes explaining the Earth’s physical environment. Both human and physical geographers develop skills in cartography, geographic information systems (GIS), and remote sensing. To meet society’s needs for greater geographic and geospatial understanding in the twenty-first century, the Department of Geography offers bachelor’s degrees (BA/BS) in Geography (with four distinct concentrations) as well as a Bachelor of Science in Meteorology and Climatology. All programs prepare students for employment as well as graduate study.

- Concentration 1. Human Geography. This concentration is designed for students interested in the human dimensions of geography. Whether from a social science or humanities perspective, students apply interests in urbanization, religion, language, population, economics, ethnicity, and politics in a spatial context that includes local, regional, and global scales. Students are also able to minor in Concentration 1. While some Concentration 1 students continue their studies at the graduate level, there also exist employment opportunities in government agencies as well as the private sector.
- Concentration 2. Travel and tourism. This concentration provides students the geographical
knowledge, the analytical skills, and the practical experience that are beneficial for successful careers in the travel/tourism industry. The sequence of specialized courses addresses the spatial, organizational, social, and economic aspects of sustainable tourism development, as well as the interaction between tourists and destinations. The program’s graduates are in demand in varied travel industry fields including retail travel, tour operations, meetings and conventions, transportation and hospitality companies, along with governmental, corporate, and community organizations involved in travel/tourism promotion and development.

**Concentration 3. GIScience.** This concentration is a technical specialization for students interested in solving social and environmental problems through advanced spatial information technology. Students learn how to visualize information in ways that reveal relationships, patterns, and trends by using computer software for cartography, remote sensing, and GIS. Cartography is the art and science of making maps; remote sensing provides a means to capture visual and digital information about the earth through airborne cameras and advanced electronic spaceborne sensors; a geographic information system is a set of computer tools for analyzing spatial data. Geographic information processing and mapping systems are used by many public and private organizations worldwide, and students graduating with these technical skills are in great demand.

**Concentration 4. Meteorological Studies.** This concentration is intended for students with interests in weather and climate who seek positions in which knowledge of meteorology and climatology is ancillary to satisfying primary task objectives. Students completing degrees in this concentration find employment in a variety of enterprises, including emergency management, environmental analysis, and transportation planning.

**Degrees in Meteorology and Climatology**

The major in Meteorology and Climatology appeals to students with primary interests in weather forecasting and/or atmospheric research. This major meets American Meteorological Society (AMS) qualifications for the title “meteorologist,” and Federal Civil Service requirements (GS 1340) for employment by the National Weather Service (NWS). Both students with broadcast meteorology aspirations and those pursuing public or private sector meteorology careers benefit from the systematic investigations of earth-atmosphere system and subsystem dynamics and to train you in the use of technology (satellites, radar, automated weather observations, and numerical weather prediction) to analyze these systems on a variety of spatial and temporal scales. The department offers a number of opportunities for students, including participation in the Cardinal Weather Service and optional coursework in Broadcast Meteorology.

The department also offers minors in geography, GIScience, meteorology and climatology, and travel and tourism.

**MAJOR IN GEOGRAPHY (BA/BS)**

**51-60 CREDITS**

Recommended minors for all concentrations include anthropology, history, natural resources, and environmental management.

**Core requirements, 15 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
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<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
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<td>GEOG 240</td>
<td>Maps and Spatial Reasoning</td>
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<td>GEOG 250</td>
<td>Spatial Analytical Methods in Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
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</table>

**Subtotal: 15**

Complete one concentration

**Concentration 1: Human Geography, 36 credits**

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<thead>
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<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 120</td>
<td>Economic Geographies of Globalization</td>
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<tr>
<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 270</td>
<td>Geography of International Conflict</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 320</td>
<td>Immigration and Ethnic Geographies of the United States</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 321</td>
<td>Urban Geography</td>
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<tr>
<td>GEOG 340</td>
<td>Cartography and Visualization of Spatial Data</td>
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<td>GEOG 350</td>
<td>Geography of the United States and Canada</td>
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<td>GEOG 423</td>
<td>Population Geography</td>
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6 credits from

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 323</td>
<td>Tourism and Geography of Food</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>NREM 309</td>
<td>Human Dimensions of Global Change</td>
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6 credits from

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<td>Geography of Latin America and the Caribbean</td>
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<tr>
<td>GEOG 354</td>
<td>Geography of Asia</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 356</td>
<td>Geography of Russia and Its Neighbors</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 357</td>
<td>Geography of Europe</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 351</td>
<td>Geography of Latin America and the Caribbean</td>
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<td>GEOG 353</td>
<td>Geography of Indiana</td>
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<td>GEOG 354</td>
<td>Geography of Asia</td>
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<td>GEOG 356</td>
<td>Geography of Russia and Its Neighbors</td>
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<td>Geography of Europe</td>
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<tr>
<td>GEOG 480</td>
<td>Distant Areas Field Studies</td>
<td>1 TO 6</td>
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Minors in related fields are recommended.

Concentration 2: Travel and tourism, 45 credits

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
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<tr>
<td>GEOG 261</td>
<td>Introduction to Sustainable Tourism</td>
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<td>GEOG 262</td>
<td>Tourism Regions</td>
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<td>GEOG 360</td>
<td>Tours and Meetings Management</td>
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<td>GEOG 120</td>
<td>Economic Geographies of Globalization</td>
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<td>GEOG 270</td>
<td>Geography of International Conflict</td>
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<td>GEOG 321</td>
<td>Urban Geography</td>
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<td>Cartography and Visualization of Spatial Data</td>
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<td>Population Geography</td>
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<td>GEOG 470</td>
<td>Political Geography</td>
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<td>GEOG 480</td>
<td>Distant Areas Field Studies</td>
<td>1 TO 6</td>
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<td>METC 230</td>
<td>Elementary Meteorology</td>
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<td>METC 331</td>
<td>Global Climatology</td>
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<tr>
<td>METC 334</td>
<td>Atmospheric Hazards</td>
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</table>

Subtotal: 60

Recommended minors for concentration 2 include modern languages and classics, hospitality management, natural resources and environmental management, and any business or area studies. Students considering MGT 300 or MKG 300 are advised to take ECON 116 or ECON 201 as the UCC Tier 1 Domain Social Sciences requirement. These two courses are also prerequisites for any business major/minor.

Concentration 3: GIScience, 36-39 credits

<table>
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<th>Course Title</th>
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<td>Cartography and Visualization of Spatial Data</td>
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<td>GEOG 342</td>
<td>Introduction to Remote Sensing</td>
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<td>GEOG 343</td>
<td>Advanced Remote Sensing</td>
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<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
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</tr>
<tr>
<td>GEOG 369</td>
<td>Professional Experience</td>
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Subtotal: 12

6 credits from

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<td>HOSP 250</td>
<td>Lodging Management</td>
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<td>HOSP 376</td>
<td>Introduction to Event Management</td>
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<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
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<td>MKG 300</td>
<td>Principles of Marketing</td>
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<td>NREM 371</td>
<td>Outdoor Recreation and Society</td>
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<td>NREM 392</td>
<td>Environmental Interpretation</td>
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<td>NREM 473</td>
<td>Outdoor Recreation Planning and Administration</td>
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<td>Leisure</td>
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Subtotal: 51

12 credits from

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<tbody>
<tr>
<td>GEOG 323</td>
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<td>HOSP 395</td>
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<td>HOSP 376</td>
<td>Introduction to Event Management</td>
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<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
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<td>NREM 371</td>
<td>Outdoor Recreation and Society</td>
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<td>Environmental Interpretation</td>
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<td>NREM 473</td>
<td>Outdoor Recreation Planning and Administration</td>
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<td>Leisure</td>
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Subtotal: 36-39

6 credits from

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<td>GEOG 444</td>
<td>Advanced Cartography and Visualization of Spatial Data</td>
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<tr>
<td>GEOG 445</td>
<td>Geographic Information Systems Applications Design and Development</td>
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<td>GEOG 448</td>
<td>Geographic Information System Design</td>
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<tr>
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<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
<td>3</td>
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<td>GEOG 270</td>
<td>Geography of International Conflict</td>
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<td>GEOG 320</td>
<td>Immigration and Ethnic Geographies of the United States</td>
<td>3</td>
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<td>GEOG 321</td>
<td>Urban Geography</td>
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<td>GEOG 423</td>
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<td>METC 331</td>
<td>Global Climatology</td>
<td>3</td>
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<tr>
<td>METC 334</td>
<td>Atmospheric Hazards</td>
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<td>METC 332</td>
<td>Climate Change and Modification</td>
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<td>METC 334</td>
<td>Atmospheric Hazards</td>
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<td>Geography of Latin America and the Caribbean</td>
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<td>Geography of Asia</td>
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<td>Geography of Russia and Its Neighbors</td>
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<td>GEOG 357</td>
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<td>GEOG 343</td>
<td>Advanced Remote Sensing</td>
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<td>Seminar in Advanced Techniques in Remote Sensing</td>
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<td>GEOG 445</td>
<td>Geographic Information Systems Applications Design and Development</td>
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<td>Geographic Information System Design</td>
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<td>METC 410</td>
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<tr>
<td>METC 435</td>
<td>Satellite, Radar, and Forecasting</td>
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</table>

**Subtotal: 51-54**

Additional course work in the basic sciences such as mathematics, physics, and computer science is encouraged. Recommended minors for concentration 4 include natural resources, environmental management, and telecommunications.

**Subtotal: 51-60**

**MAJOR IN METEOROLOGY AND CLIMATOLOGY (BA/BS)**

Recommended minors for concentration 3 include computer science, geology, mathematics, urban planning and development, biology, natural resources, and environmental management.

Concentration 4: Meteorological Studies, 36-39 credits

GEOG 344 Advanced Geographic Information 3
### 84-89 CREDITS

**Requirements List**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
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<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
</tr>
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<td>GEOG 240</td>
<td>Maps and Spatial Reasoning</td>
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<td>Spatial Analytical Methods in Geography</td>
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<td>Introduction to Geographic Information Systems</td>
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<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
<td>3</td>
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<td>Geography of the United States and Canada</td>
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<td>Synoptic Meteorology</td>
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<td>METC 450</td>
<td>Mesoscale Meteorology</td>
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<td>Calculus 1</td>
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<td>GEOG 342</td>
<td>Introduction to Remote Sensing</td>
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<td>Advanced Remote Sensing</td>
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<td>Seminar in Advanced Techniques in Remote Sensing</td>
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<td>Geographic Information Systems Applications Design and Development</td>
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**Subtotal: 6-7**

3-4 credits from

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<td>Computer Science 1: Programming Fundamentals</td>
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<td>Oceans and Nations</td>
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<td>Electricity and Magnetism 1</td>
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</table>

**Subtotal: 3-4**

Additional course work in the basic sciences such as mathematics, physics, and computer science is encouraged. Recommended minors include natural resources, environmental management, and telecommunications.

Subtotal: 84-89

### MINOR IN HUMAN GEOGRAPHY

**21 CREDITS**

**Required Courses**

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<td>GEOG 120</td>
<td>Economic Geographies of Globalization</td>
<td>3</td>
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<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
<td>3</td>
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<tr>
<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 240</td>
<td>Maps and Spatial Reasoning</td>
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<td>GEOG 270</td>
<td>Geography of International Conflict</td>
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<td>GEOG 321</td>
<td>Urban Geography</td>
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<td>GEOG 423</td>
<td>Population Geography</td>
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Subtotal: 21

*Not open to geography majors.*

### MINOR IN GISCIENCE

**21 CREDITS**

**Core requirements, 9 credits**

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<td>Introduction to Geographic Information Systems</td>
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<td>GEOG 340</td>
<td>Cartography and Visualization of Spatial Data</td>
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<td>GEOG 342</td>
<td>Introduction to Remote Sensing</td>
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Subtotal: 9
12 credits from
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<td>GEOG 343</td>
<td>Advanced Remote Sensing</td>
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<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
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<td>GEOG 443</td>
<td>Seminar in Advanced Techniques in Remote Sensing</td>
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<td>GEOG 444</td>
<td>Advanced Cartography and Visualization of Spatial Data</td>
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<td>GEOG 445</td>
<td>Geographic Information Systems Applications Design and Development</td>
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Subtotal: 12

Not open to geography concentration 3 majors.

Subtotal: 21

MINOR IN METEOROLOGY AND CLIMATOLOGY

15 CREDITS

Requirements List
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<td>Earth, Sea, and Sky: A Geographic View</td>
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Subtotal: 9

3 credits from
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<td>METC 332</td>
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Subtotal: 3

3 credits from
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<td>Broadcast Meteorology</td>
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<td>Satellite, Radar, and Forecasting</td>
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Subtotal: 3

Not open to geography concentration 4 majors.

Subtotal: 15

Not open to geography concentration 4 majors.

MINOR IN TRAVEL AND TOURISM

21 CREDITS

Required Courses
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<td>GEOG 261</td>
<td>Introduction to Sustainable Tourism</td>
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<td>GEOG 262</td>
<td>Tourism Regions</td>
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<td>GEOG 360</td>
<td>Tours and Meetings Management</td>
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<td>GEOG 460</td>
<td>Travel and Tourism Consulting</td>
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<td>GEOG 491</td>
<td>Sustainable Tourism Development</td>
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3 credits from approved 200-level or above GEOG electives

Subtotal: 3

Subtotal: 21

Not open to geography concentration 2 majors.

Teacher Education

TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)

99 CREDITS

(See Teaching Major in Social Studies, College of Sciences and Humanities (p. 162) for total requirements for this area.)

Geography concentration, 15 credits
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<td>Economic Geographies of Globalization</td>
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<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
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<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
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<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
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3 credits from
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<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>Urban Geography</td>
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</tr>
<tr>
<td>GEOG 340</td>
<td>Cartography and Visualization of Spatial Data</td>
<td>3</td>
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<td>GEOG 342</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
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<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
<td>3</td>
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<td>GEOG 350</td>
<td>Geography of the United States and Canada</td>
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<td>GEOG 351</td>
<td>Geography of Latin America and the Caribbean</td>
<td>3</td>
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<td>GEOG 353</td>
<td>Geography of Indiana</td>
<td>3</td>
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<td>GEOG 354</td>
<td>Geography of Asia</td>
<td>3</td>
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<tr>
<td>GEOG 356</td>
<td>Geography of Russia and Its Neighbors</td>
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</table>
GEOG 357  Geography of Europe  3
GEOG 423  Population Geography  3
GEOG 470  Political Geography  3

Subtotal: 3

Subtotal: 15

SCIENCE TEACHING MAJORS
(See Science, College of Sciences and Humanities for the Teaching Major in Earth/Space Science (p. 160).)

HISTORY
A. Alves, Chairperson
bsu.edu/history

Studying the past exposes people to the diversity of human cultures, helps them comprehend change and continuity over time, enhances their ability to discern patterns of comparison and contrast amid the complexities and similarities of human experience, and sharpens their communication skills.

Students with degrees in history can pursue graduate degrees or careers in fields inside and outside the humanities because the skills and habits of mind described above are valuable to every employer. Examples include: law, teaching, government, business, industry, libraries and archives, museums and art galleries, research, writing, and editing.

See College of Sciences and Humanities for information about the teacher education programs in social studies (p. 162).

See the Interdepartmental Programs listing for information about minors in ancient studies (p. 39) and Asian studies (p. 40).

MAJOR IN HISTORY (BA/BS)
39-42 credits

Studying the past exposes people to the diversity of human cultures, helps them comprehend change and continuity over time, enhances their ability to discern patterns of comparison and contrast amid the complexities and similarities of human experience, and sharpens their communication skills. Students with degrees in history can pursue graduate degrees or careers in fields inside and outside the humanities because the skills and habits of mind described above are valuable to every employer. Examples include: law, teaching, government, business, industry, libraries and archives, museums and art galleries, research, writing, and editing. See College of Sciences and Humanities for information about the teacher education programs in social studies. See the Interdepartmental Programs listing for information about minors in ancient studies and Asian studies.

Complete one concentration

CONCENTRATION 1: MAJOR, 39 CREDITS

Core requirements, 18 credits

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<td>World Civilization 2</td>
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<td>HIST 200</td>
<td>Introduction to History and Historical Methods</td>
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<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
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<td>HIST 202</td>
<td>United States History, 1877 to the Present</td>
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Subtotal: 18

21 additional credits from the following categories (other than HIST 150)

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<tr>
<td>HIST 370</td>
<td>Foundations of Asian Civilization</td>
<td>3</td>
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<tr>
<td>HIST 371</td>
<td>Tradition, Conflict, and Change in Modern Asia</td>
<td>3</td>
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<td>HIST 372</td>
<td>Africa Since 1500</td>
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<td>HIST 373</td>
<td>History of the Middle East</td>
<td>3</td>
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<tr>
<td>HIST 426</td>
<td>Topics in African History</td>
<td>3</td>
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<tr>
<td>HIST 427</td>
<td>Topics in Asian History</td>
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<tr>
<td>HIST 441</td>
<td>Comparative Slavery</td>
<td>3</td>
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<tr>
<td>HIST 484</td>
<td>Southern Africa</td>
<td>3</td>
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<td>HIST 491</td>
<td>Topics in Middle Eastern History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 493</td>
<td>History of Pre-modern East Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 495</td>
<td>Modern China, 1600 to the Present</td>
<td>3</td>
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<tr>
<td>HIST 496</td>
<td>Modern Japan, 1600 to the Present</td>
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Choose 3 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST 452</td>
<td>Women in Modern European History</td>
<td>3</td>
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<tr>
<td>HIST 454</td>
<td>The Era of World War I, 1870-1918</td>
<td>3</td>
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<tr>
<td>HIST 455</td>
<td>The Era of World War II, 1918-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 456</td>
<td>Europe Since 1945</td>
<td>3</td>
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<tr>
<td>HIST 461</td>
<td>Development of Greek Civilization</td>
<td>3</td>
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<tr>
<td>HIST 462</td>
<td>Development of Roman Civilization</td>
<td>3</td>
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<tr>
<td>HIST 463</td>
<td>Medieval Civilization</td>
<td>3</td>
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<tr>
<td>HIST 464</td>
<td>Development of Byzantine Civilization</td>
<td>3</td>
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<td>HIST 467</td>
<td>The Renaissance and Reformation, 1300-1600</td>
<td>3</td>
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<tr>
<td>HIST 471</td>
<td>France Since 1789</td>
<td>3</td>
</tr>
<tr>
<td>HIST 475</td>
<td>Britain, 1485-1714</td>
<td>3</td>
</tr>
<tr>
<td>HIST 476</td>
<td>Britain, 1760 to the Present</td>
<td>3</td>
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<td>HIST 481</td>
<td>Modern Germany</td>
<td>3</td>
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<tr>
<td>HIST 482</td>
<td>Cultural History of the Celtic Peoples from Prehistory to the Present</td>
<td>3</td>
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<td>HIST 483</td>
<td>Irish History</td>
<td>3</td>
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<td>HIST 486</td>
<td>Russian Civilization before 1917: From Kievan Rus to Imperial Russia</td>
<td>3</td>
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<tr>
<td>HIST 487</td>
<td>Soviet and Post-Soviet History</td>
<td>3</td>
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<td>HIST 497</td>
<td>Selected Topics in European History</td>
<td>3 TO 6</td>
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<td>Choose 3 credits from the following:</td>
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<td></td>
<td>United States History</td>
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<tr>
<td>HIST 204</td>
<td>American Environmental History</td>
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<td>Introduction to Sport in American Life</td>
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<td>Introduction to Black History</td>
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<td>Women in American History</td>
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</tr>
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<td>HIST 301</td>
<td>The United States and the Vietnam War</td>
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<td>HIST 310</td>
<td>Introduction to the History of Business in the United States</td>
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<td>History of the American West</td>
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<td>United States Urban History</td>
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<td>Colonial America, 1492-1763</td>
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<td>3</td>
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<tr>
<td>HIST 417</td>
<td>History of the New South</td>
<td>3</td>
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<td>HIST 421</td>
<td>American Indians in Colonial and</td>
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<td></td>
<td>U.S. History</td>
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<td>HIST 425</td>
<td>Topics in the History of the American West</td>
<td>3</td>
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<tr>
<td>HIST 430</td>
<td>United States Diplomatic History to 1914</td>
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<td>HIST 432</td>
<td>United States Diplomatic History Since 1914</td>
<td>3</td>
</tr>
<tr>
<td>HIST 449</td>
<td>American Culture Field Studies</td>
<td>3 OR 6</td>
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<tr>
<td>HIST 499</td>
<td>Selected Topics in American History</td>
<td>3 TO 6</td>
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<td>Topics in History</td>
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<tr>
<td>HIST 235</td>
<td>Historical Topics in Film</td>
<td>3</td>
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<tr>
<td>HIST 324</td>
<td>Topics in Latin American History</td>
<td>3</td>
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<td>HIST 360</td>
<td>Selected Topics in Military History</td>
<td>3</td>
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<tr>
<td>HIST 422</td>
<td>Topics in the History of Popular Culture</td>
<td>3</td>
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<tr>
<td>HIST 423</td>
<td>Topics in Religious History</td>
<td>3</td>
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<td>Topics in Race, Ethnicity, and Immigration</td>
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<td>HIST 426</td>
<td>Topics in African History</td>
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<tr>
<td>HIST 427</td>
<td>Topics in Asian History</td>
<td>3</td>
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<tr>
<td>HIST 429</td>
<td>Topics in the History of Gender and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>HIST 446</td>
<td>History in the Digital Age</td>
<td>3</td>
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<tr>
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<tr>
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</tr>
</tbody>
</table>

Choose 9 credits of History electives (9)

Subtotal: 21

At least 15 of these 21 additional credits must be in courses numbered HIST 301 and above. Students must register for HIST 200 before completing 15 credits in the major. Students are strongly encouraged to complete HIST 151, 152, 200, 201, and 202 before taking courses at HIST 301 or above. Students who intend to go to graduate or professional school are strongly encouraged to pursue a BA in concentration 1. Each individual course section can only be used to fulfill one of the requirements in World, European, United States, or Topics.
CONCENTRATION 2: PUBLIC HISTORY, 39-42 CREDITS

Admission and retention standards for concentration 2:

- Students must earn grades of at least C in all completed history courses with a combined history grade-point average of at least 3.0.

- Candidates for internships must fill out applications with the Program Director at least three weeks prior to beginning an internship.

To qualify for the internship (HIST 369), students must have completed 30 credits of history coursework.

- An overall grade-point average of 2.75 is required before enrolling in the internship.

- A written project approved by the Program Director and related to the internship is required. Credit received by students serving as assistants in departmental courses are not applicable to internship credit in this concentration.

- Students who do not meet the above requirements may appeal to the Program Director for a waiver, first by written request and then by making an oral presentation.

Core requirements, 18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>HIST 151</td>
<td>World Civilization 1</td>
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<tr>
<td>HIST 152</td>
<td>World Civilization 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 200</td>
<td>Introduction to History and Historical Methods</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>United States History, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 240</td>
<td>Introduction to Public History</td>
<td>3</td>
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</table>

Subtotal: 18

21-24 additional credits from the following categories (other than HIST 150)

Choose 3 credits from European History or World History

**European History**

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>HIST 452</td>
<td>Women in Modern European History</td>
<td>3</td>
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<td>The Era of World War I, 1870-1918</td>
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<td>Europe Since 1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 461</td>
<td>Development of Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 462</td>
<td>Development of Roman</td>
<td>3</td>
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</table>

**World History (Asia, Middle East, Africa, Latin America)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HIST 324</td>
<td>Topics in Latin American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 370</td>
<td>Foundations of Asian Civilization</td>
<td>3</td>
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<tr>
<td>HIST 371</td>
<td>Tradition, Conflict, and Change in Modern Asia</td>
<td>3</td>
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<tr>
<td>HIST 372</td>
<td>Africa Since 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 373</td>
<td>History of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>HIST 426</td>
<td>Topics in African History</td>
<td>3</td>
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<tr>
<td>HIST 427</td>
<td>Topics in Asian History</td>
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<tr>
<td>HIST 441</td>
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<td>HIST 493</td>
<td>History of Pre-modern East Asia</td>
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<tr>
<td>HIST 495</td>
<td>Modern China, 1600 to the Present</td>
<td>3</td>
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<tr>
<td>HIST 496</td>
<td>Modern Japan, 1600 to the Present</td>
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Choose 6 credits from the following:

**United States History**

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<tr>
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</thead>
<tbody>
<tr>
<td>HIST 204</td>
<td>American Environmental History</td>
<td>3</td>
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<tr>
<td>HIST 205</td>
<td>Introduction to Sport in American Life</td>
<td>3</td>
</tr>
<tr>
<td>HIST 210</td>
<td>Introduction to Black History</td>
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<tr>
<td>HIST 215</td>
<td>Women in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 301</td>
<td>The United States and the Vietnam War</td>
<td>3</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>HIST 310</td>
<td>Introduction to the History of Business in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 318</td>
<td>History of the American West</td>
<td>3</td>
</tr>
<tr>
<td>HIST 338</td>
<td>United States Urban History</td>
<td>3</td>
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<tr>
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<td>Colonial America, 1492-1763</td>
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<td>Topics in the History of the American West</td>
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<tr>
<td>HIST 499</td>
<td>Selected Topics in American History</td>
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</tr>
</tbody>
</table>

Choose 3 credits of History electives

9-12 credits from Public History Internship (HIST 369)

**Subtotal: 21-24**

- Candidates for internships must fill out applications with the program coordinator at least five months in advance of the intended internships.
- To qualify for the internship (HIST 369), students must have taken the required history courses and completed 30 credits in HIST.
- An overall grade-point average of 2.75 is required before enrolling in the internship.
- A written project approved by the coordinator and related to the internship is required.
- Credit received by students serving as assistants in departmental courses is not applicable to internship credit in this concentration.
- Students who do not meet the above requirements may appeal to the program coordinator for a waiver, first by written request and then by making an oral presentation.

**MINOR IN HISTORY**

**18 credits**

- 9 credits from World history (Europe, Asia, Middle East, Africa, Latin America)
- 9 credits from United States history

**18 crs At least 6 of these 18 credits must be in courses numbered HIST 301 and above.**

**Teacher Education**

**TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)**

**99 CREDITS**

All students seeking to become candidates for licensure in Social Studies will, via course completion and performance assessment, demonstrate mastery of the subject matter in the individual disciplines: economics, geography, government, psychology, sociology, and historical perspectives (United States and world history). See department statements for course requirements. Students will demonstrate that mastery as a result of intensive preparation in two or more disciplines, one of which must be historical perspectives. Students will complete 30 credits in historical perspectives to facilitate preparation in both United States and world history, complemented by preparation in one other discipline (15 credits in: economics, geography, government/political science, psychology, or sociology), and four other courses (12 credits), one from each of the four other disciplines, totaling 57 credits. Students are encouraged to pursue additional licensure in one or more of the other four
disciplines. Teaching programs require additional courses in educational methods. The professional education courses are included in this listing.

**Historical perspectives, 30 credits**

| HIST 151 | World Civilization 1 | 3 |
| HIST 152 | World Civilization 2 | 3 |
| HIST 200 | Introduction to History and Historical Methods | 3 |
| HIST 201 | American History, 1492-1876 | 3 |
| HIST 202 | United States History, 1877 to the Present | 3 |
| | Two courses from category 1 | 6 |
| | One course from category 2 | 3 |
| | One course from category 3 | 3 |
| | One course from category 4 | 3 |

**Subtotal: 30**

Students must register for HIST 200 before completing 15 credits in the major. The department strongly encourages students to consider taking HIST 470 and two other courses required to complete an additional departmental major in history.

**History categories**

**Category 1: U.S. History**

| HIST 210 | Introduction to Black History | 3 |
| HIST 215 | Women in American History | 3 |
| HIST 318 | History of the American West | 3 |
| HIST 400 | Colonial America, 1492-1763 | 3 |
| HIST 401 | Revolutionary America, 1763-1800 | 3 |
| HIST 405 | Pre-Civil War America, 1800-1848 | 3 |
| HIST 407 | American Civil War and Reconstruction, 1848-1877 | 3 |
| HIST 409 | An Age of Reform: The United States in the Gilded Age and Progressive Era | 3 |
| HIST 411 | The American People in Prosperity, Depression, and War | 3 |
| HIST 413 | Post-World War II America | 3 |
| HIST 415 | History of Indiana | 3 |
| HIST 416 | Pre-Civil War South, 1776-1861 | 3 |
| HIST 417 | History of the New South | 3 |
| HIST 430 | United States Diplomatic History to 1914 | 3 |
| HIST 432 | United States Diplomatic History Since 1914 | 3 |

**Category 2: European History**

| HIST 454 | The Era of World War I, 1870-1918 | 3 |
| HIST 455 | The Era of World War II, 1918-1945 | 3 |
| HIST 456 | Europe Since 1945 | 3 |
| HIST 461 | Development of Greek Civilization | 3 |
| HIST 462 | Development of Roman Civilization | 3 |
| HIST 463 | Medieval Civilization | 3 |
| HIST 464 | Development of Byzantine Civilization | 3 |
| HIST 467 | The Renaissance and Reformation, 1300-1600 | 3 |
| HIST 471 | France Since 1789 | 3 |
| HIST 475 | Britain, 1485-1714 | 3 |
| HIST 476 | Britain, 1760 to the Present | 3 |
| HIST 481 | Modern Germany | 3 |
| HIST 482 | Cultural History of the Celtic Peoples from Prehistory to the Present | 3 |
| HIST 483 | Irish History | 3 |
| HIST 486 | Russian Civilization before 1917: From Kievan Rus to Imperial Russia | 3 |
| HIST 487 | Soviet and Post-Soviet History | 3 |

**Category 3: World History**

| HIST 370 | Foundations of Asian Civilization | 3 |
| HIST 371 | Tradition, Conflict, and Change in Modern Asia | 3 |
| HIST 372 | Africa Since 1500 | 3 |
| HIST 373 | History of the Middle East | 3 |
| HIST 441 | Comparative Slavery | 3 |
| HIST 484 | Southern Africa | 3 |
| HIST 493 | History of Pre-modern East Asia | 3 |
| HIST 495 | Modern China, 1600 to the Present | 3 |
| HIST 496 | Modern Japan, 1600 to the Present | 3 |

**Category 4: Topics in History**

<p>| HIST 235 | Historical Topics in Film | 3 |
| HIST 301 | The United States and the Vietnam War | 3 |
| HIST 303 | Oral History Workshop | 3 |
| HIST 310 | Introduction to the History of Business in the United States | 3 |
| HIST 324 | Topics in Latin American History | 3 |
| HIST 338 | United States Urban History | 3 |
| HIST 360 | Selected Topics in Military History | 3 |</p>
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<tr>
<td>HIST 452</td>
<td>Women in Modern European History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 491</td>
<td>Topics in Middle Eastern History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 497</td>
<td>Selected Topics in European History</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>HIST 499</td>
<td>Selected Topics in American History</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>GEOG 344</td>
<td>Advanced Geographic Information Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 350</td>
<td>Geography of the United States and Canada</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 351</td>
<td>Geography of Latin America and the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 353</td>
<td>Geography of Indiana</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 354</td>
<td>Geography of Asia</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 356</td>
<td>Geography of Russia and Its Neighbors</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 357</td>
<td>Geography of Europe</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 423</td>
<td>Population Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 470</td>
<td>Political Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

Please consult the department chairperson for more information.

Second (concentration) licensure area:
Add one course from each of the remaining areas:
Economics, geography, government/political science, psychology, or sociology.

Subtotal: 15

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
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</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Elementary Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Elementary Macroeconomics</td>
<td>3</td>
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<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
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Subtotal: 15

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 120</td>
<td>Economic Geographies of Globalization</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 120</td>
<td>Economic Geographies of Globalization</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 121</td>
<td>Geography of the Cultural Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 150</td>
<td>Global Geography</td>
<td>3</td>
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<tr>
<td>GEOG 265</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
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</tbody>
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Subtotal: 15

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 493</td>
<td>Teaching of Psychology 1</td>
<td>1</td>
</tr>
<tr>
<td>PSYS 494</td>
<td>Teaching of Psychology 2</td>
<td>2</td>
</tr>
<tr>
<td>PSYS 367</td>
<td>Introduction to Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 468</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 362</td>
<td>Motivation and Emotion</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 363</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 364</td>
<td>Psychology of Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 316</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 317</td>
<td>Personality</td>
<td>3</td>
</tr>
</tbody>
</table>
PSYS 318  Psychopathology  3
PSYS 324  Psychology of Women  3

Subtotal: 15

Each student’s program of study must include at least one of the following courses: PSYS 416, 432, or 468. PSYS 493 and 494 are taken in sequence after the completion of all other PSYS courses.

Social Science Requirement, 12 credits
The following courses are required for disciplines that are not the student’s concentration (licensure) area. One course from each of four remaining areas: economics, geography, government/political science, psychology, and sociology.

• Economics: ECON 116 Survey of Economic Ideas (3)
• Geography: GEOG 150 Global Geography (3)
• Political Science: POLS 130 American National Government (3)
• Psychology: PSYS 100 Intro to Psychological Science (3)
• Sociology: SOC 100 Principles of Sociology (3)

Subtotal: 12

Sociology concentration, 15 credits
SOC 100  Principles of Sociology  3

6 credits from
SOC 235  Sociology of Gender  3
SOC 242  Social Problems  3
SOC 260  Social Interaction  3
SOC 343  Deviance  3

6 credits from
SOC 320  Social Inequality  3
SOC 328  Globalization and the Social World  3
SOC 421  Racial and Cultural Minorities in the United States  3
SOC 424  Family  3
SOC 427  Sociology of Religions  3
SOC 470  Population Dynamics and Demographic Methods  3

Each student must satisfactorily compile artifacts from sociology courses for the Social Science Teacher Education Portfolio in accordance with department standards.

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM
Professional education sequence, 42 credits
EDFO 420  Social, Historical, and Philosophical Foundations of Education  3
EDJH 385  Principles of Teaching in the Middle School  3
EDMU 205  Introduction to Multicultural Education  3
EDPS 251  Human Growth and Development for Secondary Education  3
EDPS 390  Educational Psychology  3
EDSE 320  Reading for Diverse Learners in Secondary Content Classes  3
EDSE 380  Principles of Teaching in the Secondary School  3
EDSE 460  Student Teaching: Secondary School  6 TO 7
EDSE 465  Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade  3 OR 5
SS 150  Introduction to Teaching History/Social Studies in Secondary Schools  3
SS 350  Teaching History/Social Studies in Junior High/Middle School  3
SS 395  Teaching Social Studies in Secondary Schools  3

Subtotal: 42

Subtotal: 99
See Professional Education Assessment/Decision Points (p. 234) for additional information.

MATHEMATICAL SCIENCES
M. Karls, Chairperson
bsu.edu/math
By focusing on strong analytical and quantitative skills, the mathematical sciences programs prepare students for professional positions in a variety of areas. The department offers majors in actuarial science, mathematical sciences, and mathematics teaching. In conjunction with the Department of Economics, the department offers a major in mathematical economics. For information on the major in mathematical economics, see Interdepartmental Programs (p. 44). The department minor in mathematics is open only to non-departmental majors. The minor in foundations of business for actuarial science and mathematics majors is open only to departmental majors.

The major in actuarial science provides students with the mathematics and business education necessary to enter the actuarial profession and prepares students for the professional actuarial exams. Actuaries apply the theory of probability and statistics along with the principles of finance to analyze and solve problems in insurance, pension plans, social security issues, and related fields.
The mathematics teaching major satisfies state licensure requirements for students preparing to teach mathematics in junior high/middle school and high school. Concentrations for this major are middle school and secondary school. Elementary education majors may choose mathematics as their area of concentration. Elementary education majors may also earn additional licensure to teach mathematics in junior high/middle school.

The mathematical sciences major offers students concentrations for specialization in two areas: mathematics and applied mathematics. These programs prepare students for professional positions in business, industry, and government, as well as graduate work in mathematics or related fields, including engineering, law, or medicine. Students wishing to declare two majors within the Department of Mathematical Sciences may do so provided they have at least 20 semester credits that are counted toward the second major not also being used as credit toward the first major.

Unless otherwise noted, all students enrolling in courses in the Department of Mathematical Sciences are expected to have completed at least three years of college preparatory mathematics in high school, including two years of algebra and one year of geometry. To begin all programs (except for the concentration in mathematics for elementary education majors), it is expected that students will have completed high school mathematics courses equivalent to the prerequisite for MATH 165.

For majors or minors in the Department of Mathematical Sciences, a grade of C- or better must be earned in each course serving as a prerequisite for other courses applied to meet program requirements and a grade of C or better must be earned for each professional education course. For graduation, a grade-point average of at least 2.5 is required in a major or minor program.

MAJOR IN ACTUARIAL SCIENCE (BS)

59-60 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 251</td>
<td>Introduction to Mathematics of Finance</td>
<td>2</td>
</tr>
<tr>
<td>MATH 259</td>
<td>Introduction to Actuarial Software</td>
<td>3</td>
</tr>
<tr>
<td>MATH 267</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 320</td>
<td>Probability</td>
<td>4</td>
</tr>
<tr>
<td>MATH 321</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 351</td>
<td>Mathematics of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MATH 354</td>
<td>Exam Prep for Exam P/1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 355</td>
<td>Exam Prep for Exam FM/2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 452</td>
<td>Long-Term Actuarial Mathematics 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 454</td>
<td>Statistics for Risk Modeling</td>
<td>4</td>
</tr>
<tr>
<td>MATH 457</td>
<td>Short-Term Actuarial Mathematics 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 498</td>
<td>Senior Seminar</td>
<td>2</td>
</tr>
<tr>
<td>RMI 270</td>
<td>Principles of Risk Management and Insurance</td>
<td>3</td>
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</table>

MATH 355 is Exam Prep for Exam FM/2.

7-8 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 354</td>
<td>Exam Prep for Exam P/1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 355</td>
<td>Exam Prep for Exam FM/2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 453</td>
<td>Long-Term Actuarial Mathematics 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 458</td>
<td>Short-Term Actuarial Mathematics 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 459</td>
<td>Investments and Financial Markets</td>
<td>4</td>
</tr>
<tr>
<td>RMI 330</td>
<td>Employee Benefits and Retirement Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 7-8

Students who pass both the Society of Actuaries Exam P/1 and FM/2 must take a 3 credit course to replace the required MATH 354 or 355. The replacement course must be selected from the electives list.

This program leads to a Bachelor of Science degree only. All students will be required to complete a survey designated by the department in the semester in which they graduate.

The following additional courses are strongly recommended, as they satisfy the Validation by Educational Experience requirements of the actuarial societies: ACC 201, ECON 201, ECON 202, and FIN 300. Students are encouraged to take PHYC 120 which satisfies the TIER 1 natural science requirement in the University Core Curriculum.

MAJOR IN MATHEMATICS (BA/BS)

56-57 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Discrete Systems</td>
<td>4</td>
</tr>
</tbody>
</table>
MATH 217  Linear Algebra  4
MATH 267  Calculus 3  4
MATH 320  Probability  4
MATH 374  Differential Equations  3
MATH 411  Abstract Algebra 1  3
MATH 462  Numerical Analysis 1  3
MATH 471  Real Analysis 1  3
MATH 498  Senior Seminar  2

**COMPLETE ONE CONCENTRATION**

Concentration 1: Mathematics, 18 credits
MATH 412  Abstract Algebra 2  3
MATH 472  Real Analysis 2  3
12 credits from
MATH 377  Complex Analysis  3
MATH 415  Mathematics of Coding and Communication  3
MATH 416  Theory of Numbers  3
MATH 441  Geometry and Topology  3
MATH 445  Differential Geometry  3
MATH 473  Boundary Value Problems  3
MATH 475  Topics in Partial Differential Equations  3
or as approved  12

**Subtotal: 56**

Mathematical science students are encouraged to take CS 120 and PHYC 120. PHYC 120 satisfies the TIER 1 natural science requirement in the University Core Curriculum. Students are strongly advised to deepen their understanding of aspects of the program by selecting additional courses in areas such as business, computer science, finance, economics, or physics. By selecting additional courses appropriately, a student can earn a related minor in computer science, physics, or foundations of business for actuarial science and mathematics majors.

**MINOR IN FOUNDATIONS OF BUSINESS FOR ACTUARIAL SCIENCE AND MATHEMATICS MAJORS**

**25-26 CREDITS**

Required Courses
ACC 201  Principles of Accounting 1  3
ECON 201  Elementary Microeconomics  3
ECON 202  Elementary Macroeconomics  3
FIN 300  Principles of Finance  3
MATH 259  Introduction to Actuarial Software  3
MATH 320  Probability  4
MATH 321  Mathematical Statistics  4
3-4 credits from
FIN 310  Investments  3
MATH 459  Investments and Financial Markets  4

**Subtotal: 25-26**
Students should complete MATH 320 to satisfy the prerequisite for MATH 321.

### MINOR IN MATHEMATICS

**23-25 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
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</tr>
<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
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<td>MATH 267</td>
<td>Calculus 3</td>
<td>4</td>
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<tr>
<td>4 credits from MATH 215</td>
<td>Discrete Systems</td>
<td>4</td>
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<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
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**Subtotal: 4**

<table>
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<tr>
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<th>Discrete Systems</th>
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<tbody>
<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 251</td>
<td>Introduction to Mathematics of Finance</td>
<td>2</td>
</tr>
<tr>
<td>MATH 259</td>
<td>Introduction to Actuarial Software</td>
<td>3</td>
</tr>
<tr>
<td>MATH 311</td>
<td>Algebraic Structures</td>
<td>3</td>
</tr>
<tr>
<td>MATH 320</td>
<td>Probability</td>
<td>4</td>
</tr>
<tr>
<td>MATH 321</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 335</td>
<td>Mathematical Models</td>
<td>3</td>
</tr>
<tr>
<td>MATH 345</td>
<td>Survey of Geometries</td>
<td>4</td>
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<tr>
<td>MATH 363</td>
<td>Numerical Analysis 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 374</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 377</td>
<td>Complex Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 415</td>
<td>Mathematics of Coding and Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 416</td>
<td>Theory of Numbers</td>
<td>3</td>
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<tr>
<td>MATH 441</td>
<td>Geometry and Topology</td>
<td>3</td>
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<tr>
<td>MATH 445</td>
<td>Differential Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 456</td>
<td>Introduction to Operations Research</td>
<td>3</td>
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<tr>
<td>MATH 460</td>
<td>History of Mathematics</td>
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<tr>
<td>MATH 462</td>
<td>Numerical Analysis 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 471</td>
<td>Real Analysis 1</td>
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<td>MATH 472</td>
<td>Real Analysis 2</td>
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<tr>
<td>MATH 473</td>
<td>Boundary Value Problems</td>
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<td>MATH 475</td>
<td>Topics in Partial Differential Equations</td>
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<tr>
<td>MATH 497</td>
<td>Student-Faculty Colloquium</td>
<td>1 TO 6</td>
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</tbody>
</table>

**Subtotal: 7-9**

### Teacher Education

Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for the descriptions of these courses and other professional requirements of the teacher education program.

### TEACHING MAJOR IN MATHEMATICS (BA/BS)

**92-93 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Discrete Systems</td>
<td>4</td>
</tr>
<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 249</td>
<td>Pre-College Mathematics from an Advanced Viewpoint 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 250</td>
<td>Pre-College Mathematics from an Advanced Viewpoint 2</td>
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</table>

**Subtotal: 23-25**

### COMPLETE ONE CONCENTRATION

**Concentration 1: Middle school, 22 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Data Analysis, Geometry, and Measurement for the Elementary Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310</td>
<td>Topics in Algebra for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 316</td>
<td>Topics in Number Theory for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 360</td>
<td>Topics in Geometry for the Elementary and Middle School Teacher</td>
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<tr>
<td>At least 6 credits from (as approved by advisor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 251</td>
<td>Introduction to Mathematics of Finance</td>
<td>2</td>
</tr>
<tr>
<td>MATH 267</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 311</td>
<td>Algebraic Structures</td>
<td>3</td>
</tr>
</tbody>
</table>
MATH 335  Mathematical Models          3  
MATH 345  Survey of Geometries         4  
MATH 416  Theory of Numbers            3  
MATH 460  History of Mathematics      3  
MATH 470  Intermediate Analysis       3  

Subtotal: 47

Concentration 2: Secondary school, 23 credits

MATH 267  Calculus 3               4  
MATH 311  Algebraic Structures     3  
MATH 335  Mathematical Models      3  
MATH 345  Survey of Geometries     4  
MATH 460  History of Mathematics  3  
MATH 470  Intermediate Analysis   3  

At least 3 credits from (as approved by advisor)

MATH 251  Introduction to Mathematics of Finance 2  
MATH 320  Probability              4  
MATH 374  Differential Equations   3  
MATH 377  Complex Analysis        3  
MATH 411  Abstract Algebra 1      3  
MATH 415  Mathematics of Coding and Communication 3  
MATH 416  Theory of Numbers       3  
MATH 441  Geometry and Topology   3  
MATH 445  Differential Geometry   3  
MATH 456  Introduction to Operations Research 3  
MATH 462  Numerical Analysis 1    3  
MATH 471  Real Analysis 1         3  
MATH 473  Boundary Value Problems 3  
MATH 475  Topics in Partial Differential Equations 3  
MATH 497  Student-Faculty Colloquium 1 TO 6  

Subtotal: 48

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

Professional education sequence, 45 credits

EDFO 420  Social, Historical, and Philosophical Foundations of Education 3  
EDJH 385  Principles of Teaching in the Middle School 3  
EDMU 205  Introduction to Multicultural Education 3  
EDPS 251  Human Growth and Development for Secondary Education 3  
EDPS 390  Educational Psychology 3  
EDSE 320  Reading for Diverse Learners in Secondary Content Classes 3  
EDSE 380  Principles of Teaching in the Secondary School 3  
MATH 150  Introduction to Teaching Mathematics in Secondary Schools 3  
MATH 331  Technology for Teaching, Learning, and Assessment in Mathematics 3  
MATH 393  Teaching and Learning Mathematics in the Middle School 3  
MATH 395  Teaching and Learning Mathematics in the Secondary School 3  

Student teaching 12  

Subtotal: 45

Subtotal: 92-93  
See Professional Education Assessment/Decision Points (p. 234) for additional information.

LICENSE IN MIDDLE SCHOOL/JUNIOR HIGH MATHEMATICS

24-31 CREDITS

Students follow the elementary education Decision Points. Only open to candidates who currently hold or who are pursuing a license in elementary: intermediate education. Recommendation for middle school/junior high licensure in mathematics will be made when the following criteria are met:

• all requirements for the elementary intermediate license;
• completion of all required mathematics content courses with a grade of C- or better and a grade-point average of 2.5 or better; MATH 161 or MATH 165, MATH 181, MATH 310, MATH 316, MATH 331, and MATH 360.
- completion of the professional education courses with a grade of C or better and a grade-point average of 2.5 or better; EDJH 385 and MATH 393.
- Prepare and successfully deliver a Calculus Presentation – a 10-15 minute presentation on a calculus topic selected from an approved list – to two faculty members in the Department of Mathematical Sciences.
- Complete student teaching in a middle school/junior high mathematics classroom or in a grade 5 or 6 elementary school classroom.

Middle school/junior high content area, mathematics, 24-31 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 161</td>
<td>Applied Calculus 1</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 181</td>
<td>Elementary Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310</td>
<td>Topics in Algebra for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 316</td>
<td>Topics in Number Theory for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 331</td>
<td>Technology for Teaching, Learning, and Assessment in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 360</td>
<td>Topics in Geometry for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 18-19

Professional education, 6-12 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDJH 385</td>
<td>Principles of Teaching in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>MATH 393</td>
<td>Teaching and Learning Mathematics in the Middle School</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 6-12

Subtotal: 24-31

Additional student teaching may be waived if elementary student teaching is in grade 5 or grade 6.

MODERN LANGUAGES AND CLASSICS

E. Riddle, Chairperson
bsu.edu/languages

The Department of Modern Languages and Classics is dedicated to the teaching of modern and classical languages, literatures, and cultures as a vital part of the University’s mission. The department strives to develop a learner-centered community that supports fundamental learning as the basis for individual inquiry. In a collaborative environment, our programs focus on providing contexts for transformative experiences, which challenge individuals to develop the judgment needed to act as knowledgeable citizens in times of growing internationalization.

The department provides a vibrant academic learning experience attuned to multidisciplinary inquiry, diversity, global awareness, environmental issues, and a commitment to civic engagement in the local, national, and international communities. The Department of Modern Languages and Classics offers programs in both ancient and modern world languages and works closely with other programs and departments to combine world language training with other disciplines.

Through its extensive programs in languages and cultures of the world, the department offers opportunities for students to enhance oral and written communication skills and technological competencies, learn how to solve problems and collaborate with others, and appreciate diverse cultures through immersive learning opportunities such as service learning and study abroad. The department will continually assess the programs in order to meet the needs of its students and the university.

The faculty is dedicated to pursuing the scholarship of discovery, integration, application, and teaching. They collaborate with their students, other language teachers, experts in other disciplines, and members of the community in the inquiry process. They use the results to advance research in the humanities and social sciences, which, in turn, enhances student learning and can speak to issues both local and global.

Why study world languages? At a practical level, most of the people in the world do not speak English as a native language. One of the main reasons for our students to study world languages is to gain a better knowledge of the multicultural modern world in which we live. Another important reason is enhanced job prospects. Almost every industry today is diversifying linguistically, and having advanced proficiency in another language is one of the greatest assets anyone can have for the current and future job market.

Ball State University supports over 150 study abroad programs, with new programs added every year. There are a variety of types of programs (consortia-based, faculty-led, and direct-enroll programs, along with internships) of different durations (from a week to a year). Approximately 500 Ball State students study abroad every year in over 40 countries on average, including China, France, Germany, Greece, Italy, Japan, Argentina, Costa Rica, and Spain, among others. Students can also be involved in language clubs (AMG, clubs of each language section, Pokemon Trainers Union, Animation Society, etc.), conversation hours, and two national world language honoraries.
Students may earn credit for previous language study through either AP tests or department-run placement exams. For additional information on placement credit and policies, please contact the department directly (765-285-1361). Students should meet frequently with their academic advisor in the department to ensure that courses are taken in sequence and that they are on track to graduate on time.

During either term of the senior year, majors in the department are required to complete a summative assessment. Guidelines will be provided by the department.

MAJOR IN CHINESE (BA/BS)

There is a college moratorium on admission to this degree.

MAJOR IN CLASSICAL CULTURES (BA/BS)

33-37 CREDITS

Required Courses

- 6 credits of LAT or 10 credits of AR at the college level or the equivalent
- CC 201 Cultural Life of Ancient Greece 3
- CC 202 Cultural Life of Ancient Rome 3
- CC 301 Classical Literature in English Translation 3 TO 6
- CC 305 Classical Myth and Theory 3

15 credits from CC, AR, LAT or from approved courses on the cultures of the ancient Mediterranean in other disciplines. At least 9 of the 15 credits must be from 300- and 400-level courses.

Subtotal: 15

Subtotal: 33-37

MAJOR IN FRENCH (BA/BS)

41 CREDITS

Required Courses

- FR 101 Beginning French 1 4
- FR 102 Beginning French 2 4
- FR 201 Intermediate French 1 3
- FR 202 Intermediate French 2 3
- FR 301 Conversation 3
- FR 302 Composition 3
- FR 360 Introduction to French Literary 3

18 credits from 300- and 400-level FR courses

Subtotal: 41

MAJOR IN GERMAN (BA/BS)

41 CREDITS

Required Courses

- GER 101 Beginning German 1 4
- GER 102 Beginning German 2 4
- GER 201 Intermediate German 1 3
- GER 202 Intermediate German 2 3
- GER 301 Conversation 3
- GER 302 Composition 3
- 21 credits from 300- and 400-level GER courses

Subtotal: 41

MAJOR IN JAPANESE (BA/BS)

45 CREDITS

Required Courses

- JAPA 101 Beginning Japanese 1 4
- JAPA 102 Beginning Japanese 2 4
- JAPA 201 Intermediate Japanese 1 4
- JAPA 202 Intermediate Japanese 2 4
- JAPA 301 Advanced Japanese 1 4
- JAPA 302 Advanced Japanese 2 4
- JAPA 303 Readings in Japanese 3
- JAPA 304 Composition 3
- JAPA 334 Japanese Culture and Civilization 3
- JAPA 401 Contemporary Masterpieces 3
  or
- JAPA 402 Classical Masterpieces 3
  9 credits from 300- and 400-level JAPA courses

Subtotal: 45

JAPA 402 may substitute for JAPA 401. HIST 496 (Modern Japan, 1600 to Present) may substitute for either JAPA 334 or JAPA 401.

MAJOR IN SPANISH (BA/BS)
### 44 CREDITS

Language, linguistics, and culture studies concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SP 101</td>
<td>Beginning Spanish 1</td>
<td>4</td>
</tr>
<tr>
<td>SP 102</td>
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<tr>
<td>SP 201</td>
<td>Intermediate Spanish 1</td>
<td>3</td>
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<tr>
<td>SP 202</td>
<td>Intermediate Spanish 2</td>
<td>3</td>
</tr>
<tr>
<td>SP 301</td>
<td>Conversation and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SP 302</td>
<td>Composition and Grammar</td>
<td>3</td>
</tr>
<tr>
<td>SP 335</td>
<td>Topics in Hispanic Cultures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 44**

SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.

Cultural and literary studies concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>SP 101</td>
<td>Beginning Spanish 1</td>
<td>4</td>
</tr>
<tr>
<td>SP 102</td>
<td>Beginning Spanish 2</td>
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<tr>
<td>SP 201</td>
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<td>SP 202</td>
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<tr>
<td>SP 301</td>
<td>Conversation and Composition</td>
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<td>SP 302</td>
<td>Composition and Grammar</td>
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<tr>
<td>SP 335</td>
<td>Topics in Hispanic Cultures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 44**

SP 361 may substitute for SP 301; SP 306 may substitute for SP 302.

A minimum grade of C is required on all courses on the Spanish major.

### MINOR IN ARABIC

There is a college moratorium on admission to this degree.

### MINOR IN CHINESE

#### 26-27 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CH 101</td>
<td>Beginning Chinese 1</td>
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</tr>
<tr>
<td>CH 102</td>
<td>Beginning Chinese 2</td>
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<td>CH 201</td>
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<td>CH 202</td>
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<tr>
<td>CH 301</td>
<td>Advanced Chinese 1</td>
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<tr>
<td>CH 334</td>
<td>Chinese Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CH 361</td>
<td>Survey of Chinese Culture</td>
<td>3</td>
</tr>
<tr>
<td>CH 362</td>
<td>Survey of Chinese-American Culture</td>
<td>3</td>
</tr>
<tr>
<td>CH 363</td>
<td>Seminar in Chinese and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 26-27**

HIST 495 may substitute for CH 334 with permission of the department chairperson.

### MINOR IN CLASSICAL CULTURE

#### 15 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CC 301</td>
<td>Classical Literature in English Translation</td>
<td>3</td>
</tr>
<tr>
<td>CC 305</td>
<td>Classical Myth and Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 15**

### MINOR IN FRENCH

#### 23 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 101</td>
<td>Beginning French 1</td>
<td>4</td>
</tr>
<tr>
<td>FR 102</td>
<td>Beginning French 2</td>
<td>4</td>
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<tr>
<td>FR 201</td>
<td>Intermediate French 1</td>
<td>3</td>
</tr>
<tr>
<td>FR 202</td>
<td>Intermediate French 2</td>
<td>3</td>
</tr>
<tr>
<td>FR 301</td>
<td>Conversation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 23**
FR 302  Composition  3  
3 credits from 300- and 400-level FR courses  3  
Subtotal: 23

MINOR IN GERMAN
23 CREDITS
Required Courses
GER 101  Beginning German 1  4  
GER 102  Beginning German 2  4  
GER 201  Intermediate German 1  3  
GER 202  Intermediate German 2  3  
GER 301  Conversation  3  
GER 302  Composition  3  
3 credits from 300- and 400-level GER courses  3  
Subtotal: 23

MINOR IN JAPANESE
30 CREDITS
Required Courses
JAPA 101  Beginning Japanese 1  4  
JAPA 102  Beginning Japanese 2  4  
JAPA 201  Intermediate Japanese 1  4  
JAPA 202  Intermediate Japanese 2  4  
JAPA 301  Advanced Japanese 1  4  
JAPA 302  Advanced Japanese 2  4  
JAPA 334  Japanese Culture and Civilization  3  
3 credits from
JAPA 303  Readings in Japanese  3  
JAPA 304  Composition  3  
JAPA 338  Business Japanese  3  
Subtotal: 30
HIST 496 (Modern Japan, 1600 to Present) may substitute for JAPA 334 with permission of the department chairperson.

MINOR IN SPANISH
23 CREDITS
Required Courses
SP 102  Beginning Spanish 1  4  
SP 201  Intermediate Spanish 1  3  
SP 202  Intermediate Spanish 2  3  
SP 301  Conversation and Composition  3  
SP 302  Composition and Grammar  3  
3 credits from 300- and 400-level SP courses  3  
Subtotal: 23
SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.
A minimum grade of C is required on all courses on the Spanish minor.

Teacher Education
Teaching programs require additional courses in educational methods. The professional education courses are included in this listing. See the Department of Educational Studies (p. 242) and Teachers College (p. 232) for the descriptions of these courses and other professional requirements of the teacher education program. In addition to required courses in educational methods, students seeking a license to teach in the modern foreign languages are required to complete a study program where the target language is spoken. The department and university will assist the student in finding a placement. Exceptions will be granted rarely and only with the permission of the chairperson and faculty of the respective language. (Students of Latin will design a program of cultural study in consultation with the Classics faculty.) Students are also required to compile and submit artifacts for their teaching portfolios that conform to the standards stipulated by the Indiana Professional Standards Board. For specific requirements, students should see the licensure area Web site or handbook.

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM
PROFESSIONAL EDUCATION SEQUENCE
40 credits
EDFO 420  Social, Historical, and Philosophical Foundations of Education  3  
EDJH 385  Principles of Teaching in the Middle School  3  
EDMU 205  Introduction to Multicultural Education  3  
EDPS 251  Human Growth and Development for Secondary Education  3  
EDPS 390  Educational Psychology  3  
EDSE 380  Principles of Teaching in the  3
Secondary School

**FL 150**  
Introduction to Teaching World Languages in Secondary Schools  
3

**FL 295**  
Foreign Language Field Experience  
1

**FL 395**  
Teaching Methods, Reading Strategies, and Materials for World Language  
3

**FL 396**  
Technology and Assessment for World Language Education  
Student teaching  
12

Subtotal: 40

See Professional Education Assessment/Decision Points (p. 234) for additional information.

**TEACHING MAJOR IN FOREIGN LANGUAGE:**  
**CHINESE (BA/BS)**  
There is a college moratorium on admission to this degree.

**TEACHING MAJOR IN FOREIGN LANGUAGE:**  
**FRENCH (BA/BS)**

**84 CREDITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 101</td>
<td>Beginning French 1</td>
<td>4</td>
</tr>
<tr>
<td>FR 102</td>
<td>Beginning French 2</td>
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<tr>
<td>FR 201</td>
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<tr>
<td>FR 202</td>
<td>Intermediate French 2</td>
<td>3</td>
</tr>
<tr>
<td>FR 301</td>
<td>Conversation</td>
<td>3</td>
</tr>
<tr>
<td>FR 302</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>FR 334</td>
<td>Civilization and Culture: The Old Regime</td>
<td>3</td>
</tr>
<tr>
<td>FR 335</td>
<td>Civilization and Culture: Modern France</td>
<td>3</td>
</tr>
<tr>
<td>FR 360</td>
<td>Introduction to French Literary Readings</td>
<td>3</td>
</tr>
<tr>
<td>FR 401</td>
<td>History of French Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>FR 402</td>
<td>History of French Literature 2</td>
<td>3</td>
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<td></td>
<td>12 credits from 300- and 400-level FR courses</td>
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Subtotal: 44

**JEAPANSE (BA/BS)**

**85 CREDITS**

<table>
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<tbody>
<tr>
<td>HIST 496</td>
<td>Modern Japan, 1600 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 101</td>
<td>Beginning Japanese 1</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 102</td>
<td>Beginning Japanese 2</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 201</td>
<td>Intermediate Japanese 1</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 202</td>
<td>Intermediate Japanese 2</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 301</td>
<td>Advanced Japanese 1</td>
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</tr>
<tr>
<td>JAPA 302</td>
<td>Advanced Japanese 2</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 334</td>
<td>Japanese Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 337</td>
<td>Japanese Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 401</td>
<td>Contemporary Masterpieces</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9 credits from 300- and 400-level JAPA courses</td>
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</tbody>
</table>

Subtotal: 45

**LATIN (BA/BS)**

**82 CREDITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CC 202</td>
<td>Cultural Life of Ancient Rome</td>
<td>3</td>
</tr>
<tr>
<td>CC 301</td>
<td>Classical Literature in English Translation</td>
<td>3</td>
</tr>
<tr>
<td>LAT 101</td>
<td>Beginning Latin 1</td>
<td>3</td>
</tr>
<tr>
<td>LAT 102</td>
<td>Beginning Latin 2</td>
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<tr>
<td>LAT 201</td>
<td>Intermediate Latin 1</td>
<td>3</td>
</tr>
<tr>
<td>LAT 202</td>
<td>Intermediate Latin 2</td>
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</tr>
</tbody>
</table>

Subtotal: 21

**TEACHING MAJOR IN FOREIGN LANGUAGE:**

**GERMAN (BA/BS)**

**84 CREDITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 101</td>
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<td>4</td>
</tr>
<tr>
<td>GER 102</td>
<td>Beginning German 2</td>
<td>4</td>
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<tr>
<td>GER 201</td>
<td>Intermediate German 1</td>
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<tr>
<td>GER 202</td>
<td>Intermediate German 2</td>
<td>3</td>
</tr>
<tr>
<td>GER 301</td>
<td>Conversation</td>
<td>3</td>
</tr>
<tr>
<td>GER 302</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>GER 335</td>
<td>Civilization and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

21 credits from 300- and 400-level GER courses

Subtotal: 21
12-15 credits from 300- and 400-level LAT courses
9-12 credits from CC or AR courses

Subtotal: 42

TEACHING MAJOR IN FOREIGN LANGUAGE: SPANISH (BA/BS)

84 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Beginning Spanish 1</td>
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<tr>
<td>SP 102</td>
<td>Beginning Spanish 2</td>
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<td>SP 201</td>
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<tr>
<td>SP 202</td>
<td>Intermediate Spanish 2</td>
<td>3</td>
</tr>
<tr>
<td>SP 301</td>
<td>Conversation and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SP 302</td>
<td>Composition and Grammar</td>
<td>3</td>
</tr>
<tr>
<td>SP 335</td>
<td>Topics in Hispanic Cultures</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>SP 337</td>
<td>Spanish Phonetics and Phonology: Theory and Application</td>
<td>3</td>
</tr>
<tr>
<td>SP 340</td>
<td>Survey in Spanish Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>SP 361</td>
<td>Survey of Spanish Literature</td>
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<td>SP 362</td>
<td>Survey of Spanish-American Literature</td>
<td>3</td>
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<tr>
<td>SP 403</td>
<td>Seminar in Cultural and Literary Studies</td>
<td>3 TO 9</td>
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<tr>
<td>or</td>
<td>SP 404 Seminar in Language, Linguistics, and Culture</td>
<td>3 TO 9</td>
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</tbody>
</table>

6 credits from 300- and 400-level SP courses

Subtotal: 44

SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.

A minimum grade of C is required on all courses on the Spanish teaching major.

PHILOSOPHY AND RELIGIOUS STUDIES

D. Reagan, Chairperson
bsu.edu/philosophy

Philosophy

Philosophy students learn to think. Philosophy students become precise readers, writers, and speakers who are able to accurately and creatively understand big questions concerning right and wrong, justice, freedom, beauty, knowledge, and truth. By evaluating historical and contemporary arguments, philosophy students are able to justify their conception of the world and humanity’s place in it with public reasons.

Religious Studies

The academic study of religion addresses many dimensions and functions of religion in the world’s cultures. Among these are sacred scripture, symbols, beliefs, rituals, and ethics. It also examines the dynamic relationship between religion and other social, economic, and political institutions. The academic study of religion fosters a critical understanding of religious traditions, issues, questions, and values. In addition, it cultivates awareness of religion’s influence within the world and promotes appreciation for the diversity of religious beliefs and practices.

The department’s programs in philosophy and religious studies offer excellent preparation for professional work in education, law, public service, government, writing, and religion.

MAJOR IN PHILOSOPHY (BA/BS)

33 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
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<tbody>
<tr>
<td>PHIL 200</td>
<td>Symbolic Logic</td>
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<tr>
<td>6 credits from</td>
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<tr>
<td>PHIL 300</td>
<td>History of Ancient Philosophy</td>
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<tr>
<td>PHIL 302</td>
<td>History of Modern Philosophy</td>
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</tr>
<tr>
<td>PHIL 306</td>
<td>Contemporary Philosophy</td>
<td>3</td>
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</table>

Subtotal: 6

6 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHIL 203</td>
<td>Social Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 210</td>
<td>Philosophy of Religion</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 230</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 235</td>
<td>Bioethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 304</td>
<td>Philosophy of Sport</td>
<td>3</td>
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<tr>
<td>PHIL 310</td>
<td>African Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 312</td>
<td>Current Issues in Philosophy</td>
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Subtotal: 6

9 credits from

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PHIL 320</td>
<td>Emotions, Character, and Moral Responsibility</td>
<td>3</td>
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</tbody>
</table>
PHIL 370  Existentialism  3
PHIL 380  Justice  3
PHIL 404  Metaphysics  3
PHIL 406  Feminist Ethics and Epistemology  3
PHIL 410  Epistemology  3
PHIL 415  Topics in Neurophilosophy  3
PHIL 420  Contemporary Ethical Theory and Problems  3

Subtotal: 15
9 credits from additional PHIL courses

Subtotal: 9

MAJOR IN RELIGIOUS STUDIES (BA/BS)
36 CREDITS
Select one of the following:
RELS 110  World Religions  3
RELS 160  Religion in Culture  3

Subtotal: 3
Select two of the following:
RELS 201  Religion and Popular Culture  3
RELS 206  Sex and the Bible  3
RELS 210  Religion, Morality, and Public Debate  3

Subtotal: 6
Select two of the following:
RELS 208  The Qur'an  3
RELS 250  Biblical Interpretation  3
RELS 375  Paul's Letters  3
RELS 380  Religion, Non-Violence and War  3

Subtotal: 6
Select two of the following:
RELS 275  Islam  3
RELS 285  Religious Diversity in the United States  3
RELS 290  Hinduism  3
RELS 390  Buddhism  3

Subtotal: 6
Select one of the following:
RELS 400  Immersive or Experiential Learning  3
RELS 403  Reading and Special Study  1 TO

Subtotal: 3
Select 4 more courses from RELS or from the following list (maximum of two courses for Non-RELS electives):
ANTH 451  Witchcraft, Magic, and Religion  3
CC 205  Mythologies of the World  3
CC 305  Classical Myth and Theory  3
HIST 423  Topics in Religious History  3
HIST 491  Topics in Middle Eastern History  3
PHIL 210  Philosophy of Religion  3
SOC 227  Spirituality, Self, and Society  3
SOC 427  Sociology of Religions  3

Subtotal: 12
Subtotal: 36

MINOR IN ETHICS
18 CREDITS
Requirements List
PHIL 202  Ethics  3
Applied Ethics
PHIL 230  Environmental Ethics  3
PHIL 235  Bioethics  3
PHIL 304  Philosophy of Sport  3
PHIL 406  Feminist Ethics and Epistemology  3
RELS 210  Religion, Morality, and Public Debate  3

Subtotal: 6-9
Ethical Theory
PHIL 203  Social Philosophy  3
PHIL 320  Emotions, Character, and Moral Responsibility  3
PHIL 380  Justice  3
PHIL 415  Topics in Neurophilosophy  3
PHIL 420  Contemporary Ethical Theory and Problems  3

Subtotal: 6-9
Students must take at least one 400-level course. Students must earn a minimum grade of C in all required courses.
Subtotal: 18

MINOR IN PHILOSOPHY
## 18 CREDITS

At least 3 credits from

<table>
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<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
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<td>PHIL 102</td>
<td>Introduction to Techniques of Critical Reasoning</td>
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<td>PHIL 200</td>
<td>Symbolic Logic</td>
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<td>Ethics</td>
<td>3</td>
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Subtotal: 3

At least 6 credits from

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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 300</td>
<td>History of Ancient Philosophy</td>
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<td>PHIL 302</td>
<td>History of Modern Philosophy</td>
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</tr>
<tr>
<td>PHIL 306</td>
<td>Contemporary Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Emotions, Character, and Moral Responsibility</td>
<td>3</td>
</tr>
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<td>Existentialism</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 380</td>
<td>Justice</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 406</td>
<td>Feminist Ethics and Epistemology</td>
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<td>Topics in Neurophilosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 420</td>
<td>Contemporary Ethical Theory and Problems</td>
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Subtotal: 6

9 credits of additional electives from PHIL courses

Subtotal: 9

Subtotal: 18

## MINOR IN RELIGIOUS STUDIES

### 18 CREDITS

Select one of the following:

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>RELS 110</td>
<td>World Religions</td>
<td>3</td>
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<tr>
<td>RELS 160</td>
<td>Religion in Culture</td>
<td>3</td>
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Subtotal: 3

Select one of the following:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>RELS 201</td>
<td>Religion and Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>RELS 206</td>
<td>Sex and the Bible</td>
<td>3</td>
</tr>
<tr>
<td>RELS 210</td>
<td>Religion, Morality, and Public Debate</td>
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Subtotal: 3

Select one of the following:

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>RELS 275</td>
<td>Islam</td>
<td>3</td>
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<tr>
<td>RELS 285</td>
<td>Religious Diversity in the United States</td>
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</tr>
<tr>
<td>RELS 290</td>
<td>Hinduism</td>
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### RELS 390

Buddhism

Subtotal: 3

Select two of the following:

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<tbody>
<tr>
<td>RELS 208</td>
<td>The Qur'an</td>
<td>3</td>
</tr>
<tr>
<td>RELS 250</td>
<td>Biblical Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>RELS 375</td>
<td>Paul's Letters</td>
<td>3</td>
</tr>
<tr>
<td>RELS 380</td>
<td>Religion, Non-Violence and War</td>
<td>3</td>
</tr>
<tr>
<td>RELS 400</td>
<td>Immersive or Experiential Learning</td>
<td>3</td>
</tr>
<tr>
<td>RELS 403</td>
<td>Reading and Special Study</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>RELS 450</td>
<td>Critical Issues in the Study of Religion</td>
<td>3</td>
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Subtotal: 6

Select one more courses from RELS or from the following list (maximum of two courses for Non-RELS electives):

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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANTH 451</td>
<td>Witchcraft, Magic, and Religion</td>
<td>3</td>
</tr>
<tr>
<td>CC 205</td>
<td>Mythologies of the World</td>
<td>3</td>
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<tr>
<td>CC 305</td>
<td>Classical Myth and Theory</td>
<td>3</td>
</tr>
<tr>
<td>HIST 423</td>
<td>Topics in Religious History</td>
<td>3</td>
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<tr>
<td>HIST 491</td>
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<td>3</td>
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<td>Spirituality, Self, and Society</td>
<td>3</td>
</tr>
<tr>
<td>SOC 427</td>
<td>Sociology of Religions</td>
<td>3</td>
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</table>

Subtotal: 3

Subtotal: 18

## PHYSICS AND ASTRONOMY

R. Fluegeman, Chairperson

bsu.edu/physics

### Physics Major, Physics Teaching, Pre-Engineering Preparation, Astronomy and Minors in Physics, Applied Physics, Astrophysics and Introductory Astronomy

The Department of Physics and Astronomy offers majors in physics, physics teaching, pre-engineering preparation, and astronomy as well as several programs for minors in astronomy and/or physics. For majors, general physics is a course of study for those students who intend to pursue graduate work or industrial careers in physics, astronomy, or engineering. Minors are available in physics, applied physics in electronics, applied physics in nanoscience, astrophysics, and introductory astronomy, and are designed for those students who have an interest in those fields but have a major in another area. The Department of Physics and Astronomy offers majors in physics, physics teaching, pre-engineering preparation, and astronomy as well as
several programs for minors in astronomy and/or physics. For majors, general physics is a course of study for those students who intend to pursue graduate work or industrial careers in physics, astronomy, or engineering. Minors are available in physics, applied physics in electronics, applied physics in nanoscience, astrophysics, and introductory astronomy, and are designed for those students who have an interest in those fields but have a major in another area.

Pre-Engineering Major
The pre-engineering major is generally a five-year program in which students attend Ball State for three years and then transfer to an engineering school to complete requirements for their engineering degree. Upon successful completion of the engineering program, a student is eligible to receive a bachelor’s degree from Ball State in addition to the engineering degree from the other institution. Students in this program are responsible for knowing and meeting the graduation requirements of both Ball State and the school to which they transfer. Admission to Ball State as a pre-engineering major does not guarantee admission to an accredited school of engineering. Electives in the program permit tailoring the program for the wide variety of engineering specialties.

Astronomy Major
The Department of Physics and Astronomy offers a major in astronomy as well as minors in astrophysics and introductory astronomy. For majors, astronomy gives students many of the same skills as a physicist plus skills like digital image processing, remote sensing and applied spectral analysis. People with a bachelor’s degree in astronomy are qualified for jobs in observatories, planetariums, national laboratories, and the aerospace industry. This degree also prepares a person for graduate study in astronomy, physics, and related fields.

Physics Teaching Major
The Physics Teaching Major is a four-year accredited program that meets the requirements for students to obtain an undergraduate degree with an Indiana secondary physics teaching license. Students in this degree program receive a strong foundation in physics content knowledge, along with courses in educational foundations, educational psychology, multicultural education, secondary education, and science education pedagogy. Students may use this degree and license to teach high school physics or middle school science, but additional science courses are recommended for students who wish to teach middle school science.

MAJOR IN ASTRONOMY (BA/BS)

<table>
<thead>
<tr>
<th>Credit</th>
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<th>Course Description</th>
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<tr>
<td>ASTR 120</td>
<td>The Sun and Stars</td>
<td>3</td>
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<td>ASTR 122</td>
<td>Stellar Evolution, Galaxies, and Cosmology</td>
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<tr>
<td>ASTR 330</td>
<td>Astronomy and Astrophysics 1</td>
<td>4</td>
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<td>ASTR 332</td>
<td>Astronomy and Astrophysics 2</td>
<td>4</td>
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<td>ASTR 380</td>
<td>Topics in Modern Astronomy</td>
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<td>ASTR 386</td>
<td>Advanced Observational Astronomy</td>
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<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
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</tr>
<tr>
<td>MATH 166</td>
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<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 267</td>
<td>Calculus 3</td>
<td>4</td>
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<td>PHYS 120</td>
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<tr>
<td>PHYS 122</td>
<td>General Physics 2</td>
<td>5</td>
<td></td>
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<tr>
<td>PHYS 260</td>
<td>Introduction to Modern Physics</td>
<td>4</td>
<td></td>
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<td>PHYS 330</td>
<td>Mechanics</td>
<td>3</td>
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<tr>
<td>PHYS 464</td>
<td>Introduction to Quantum Mechanics</td>
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<td></td>
</tr>
<tr>
<td>PHYS 483</td>
<td>Seminar in Physics</td>
<td>1 TO 2</td>
<td></td>
</tr>
<tr>
<td>PHYS 485</td>
<td>Measures of Learning in Physics</td>
<td>1</td>
<td></td>
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<tr>
<td>PHYS 482</td>
<td>Independent Studies in Physics</td>
<td>1 TO 3</td>
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</tr>
<tr>
<td>PHYS 369</td>
<td>Professional Experience</td>
<td>1 TO 3</td>
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<td>PHYS 479</td>
<td>Practical Experience</td>
<td>1 TO 3</td>
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<tr>
<td>HONR 499</td>
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Electives, 6-7 credits from the following:

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<th>Credits</th>
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<tr>
<td>PHYS 336</td>
<td>Computational Physics</td>
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<td>PHYS 340</td>
<td>Physical Optics</td>
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<tr>
<td>PHYS 354</td>
<td>Electronics 1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 434</td>
<td>Thermal Physics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHYS 450</td>
<td>Electricity and Magnetism 1</td>
<td>3</td>
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</table>

Subtotal: 67-68

MAJOR IN PHYSICS (BA/BS)
57-60 CREDITS

Required courses, 48 credits

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<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
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<td>MATH 267</td>
<td>Calculus 3</td>
<td>4</td>
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<tr>
<td>PHYC 118</td>
<td>Explorations in Physical Science and Engineering</td>
<td>2</td>
</tr>
<tr>
<td>PHYC 120</td>
<td>General Physics 1</td>
<td>5</td>
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<tr>
<td>PHYC 122</td>
<td>General Physics 2</td>
<td>5</td>
</tr>
<tr>
<td>PHYC 260</td>
<td>Introduction to Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 262</td>
<td>Modern Physics Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>PHYC 330</td>
<td>Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 434</td>
<td>Thermal Physics</td>
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<tr>
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<td>PHYC 464</td>
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<tr>
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<td>1 TO 2</td>
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<tr>
<td>PHYC 485</td>
<td>Measures of Learning in Physics</td>
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<td>PHYC 482</td>
<td>Independent Studies in Physics</td>
<td>1 TO 3</td>
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<tr>
<td>or</td>
<td>Professional Experience</td>
<td>1 TO 3</td>
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<tr>
<td>or</td>
<td>Practical Experience</td>
<td>1 TO 3</td>
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<td>or</td>
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<td>Subtotal: 57-60</td>
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</table>

Any 3 300-level or 400-level courses in APHY, ASTR, and/or PHYC may be approved as electives

Subtotal: 9-12

MAJOR IN PRE-ENGINEERING (BA/BS)

63 CREDITS

Required courses

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<tbody>
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<td>CHEM 111</td>
<td>General Chemistry 1</td>
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<td>CHEM 112</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>CS 120</td>
<td>Computer Science 1: Programming Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>MATH 165</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
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<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
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<td>PHYC 122</td>
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<td>PHYC 260</td>
<td>Introduction to Modern Physics</td>
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<tr>
<td>PHYC 262</td>
<td>Modern Physics Laboratory</td>
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<td>PHYC 356</td>
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</tr>
<tr>
<td>PHYC 482</td>
<td>Independent Studies in Physics</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>or</td>
<td>Professional Experience</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>or</td>
<td>Practical Experience</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>or</td>
<td>HONR 499 Senior Honors Project</td>
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<td></td>
<td>TDPT 105 Technical Design Graphics</td>
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<tr>
<td>or</td>
<td>TEDU 102 Design Techniques</td>
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To begin this program it is expected that students will have completed high school mathematics courses equivalent to the prerequisite for MATH 165.

MINOR IN APPLIED PHYSICS

26-28 CREDITS

Required Courses

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td>MATH 166</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 120</td>
<td>General Physics 1</td>
<td>5</td>
</tr>
<tr>
<td>PHYC 122</td>
<td>General Physics 2</td>
<td>5</td>
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</tbody>
</table>

Complete one concentration

Concentration 1: Electronics, 8 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYC 354</td>
<td>Electronics 1</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal: 18
PHYC 356  Electronics 2  4

Subtotal: 8

Concentration 2: Nanoscience, 10 credits
APHY 310  Introduction to Nanoscience and Technology  3
PHYC 260  Introduction to Modern Physics  4
PHYC 466  Condensed Matter Physics  3

Subtotal: 10

Subtotal: 26-28

MINOR IN ASTROPHYSICS
26 CREDITS
Required Courses
ASTR 330  Astronomy and Astrophysics 1  4
ASTR 332  Astronomy and Astrophysics 2  4
MATH 165  Calculus 1  4
MATH 166  Calculus 2  4
PHYC 120  General Physics 1  5
PHYC 122  General Physics 2  5

Subtotal: 26

MINOR IN INTRODUCTORY ASTRONOMY
14-15 CREDITS
Required Courses
ASTR 120  The Sun and Stars  3
ASTR 122  Stellar Evolution, Galaxies, and Cosmology  3
ASTR 124  The Solar System  3
ASTR 302  Observational Astronomy  3
2-3 credits from
ASTR 200  Topics in Astronomy  1 TO  3
ASTR 380  Topics in Modern Astronomy  2
PHYC 469  Immersion Experiences Related to Physics and Astronomy  3

Subtotal: 2-3

Subtotal: 14-15

MINOR IN PHYSICS
33 CREDITS
Required Courses
MATH 165  Calculus 1  4
MATH 166  Calculus 2  4
MATH 267  Calculus 3  4
MATH 120  General Physics 1  5
MATH 122  General Physics 2  5
PHYC 260  Introduction to Modern Physics  4
PHYC 262  Modern Physics Laboratory  2
PHYC 330  Mechanics  3
PHYC 450  Electricity and Magnetism 1  3

Subtotal: 33

Teacher Education
Science Teaching Majors
(See Science, College of Sciences and Humanities (p. 160) for the teaching majors in science.)

TEACHING MAJOR IN PHYSICS (BA/BS)
99 CREDITS
Requirements List
CHEM 111  General Chemistry 1  4
CHEM 112  General Chemistry 2  4
MATH 165  Calculus 1  4
MATH 166  Calculus 2  4
MATH 267  Calculus 3  4
PHYC 118  Explorations in Physical Science and Engineering  2
PHYC 120  General Physics 1  5
PHYC 122  General Physics 2  5
PHYC 260  Introduction to Modern Physics  4
PHYC 262  Modern Physics Laboratory  2
PHYC 330  Mechanics  3
PHYC 434  Thermal Physics  3
PHYC 450  Electricity and Magnetism 1  3
PHYC 485  Measures of Learning in Physics  1
PHYC 482  Independent Studies in Physics  1 TO  3

or

PHYC 369  Professional Experience  1 TO  3

or

PHYC 479  Practical Experience  1 TO  3

or

HONR 499  Senior Honors Project  3
2 approved elective courses in PHYC 6

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

Professional education sequence, 39 credits

EDFO 420 Social, Historical, and Philosophical Foundations of Education 3
EDJH 385 Principles of Teaching in the Middle School 3
EDMU 205 Introduction to Multicultural Education 3
EDPS 251 Human Growth and Development for Secondary Education 3
EDPS 390 Educational Psychology 3
EDSE 320 Reading for Diverse Learners in Secondary Content Classes 3
EDSE 380 Principles of Teaching in the Secondary School 3
EDSE 460 Student Teaching: Secondary School 6 TO 7
EDSE 465 Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade 3 OR 5
SCI 150 Introduction to Teaching Science in Secondary Schools 3
SCI 295 Introduction to the Teaching of Science 3
SCI 396 Using Science Methods and Materials 3

Subtotal: 42

Subtotal: 99

See Professional Education Assessment/Decision Points (p. 234) for additional information.

POLITICAL SCIENCE

D. Wheeler, Chairperson
bsu.edu/poli-sci

The world and its problems are both the main concern and the principal laboratory of the modern political scientist. Political scientists study the political behavior of people, groups, and nations in an effort to understand why they behave as they do, to predict what they will do next, and sometimes to suggest how they should behave in the future.

Students majoring in political science have three areas for course concentration: political science (general), economics, and international studies. In addition, students interested in attending law school may declare a pre-law designation and be advised of the selected courses needed to meet entrance requirements into law school.

For information on the major in legal studies (an American Bar Association approved paralegal program) and on the European studies minor, which are housed in the department, see the listing for Interdepartmental Programs (p. 39), or contact the Political Science department.

MAJOR IN POLITICAL SCIENCE (BA/BS)

42-50 CREDITS

The political science curriculum incorporates a progression of required, core, elective, and capstone courses. Students are expected to have a foundation of required and core courses before taking elective and capstone courses, including internships. It is the personal responsibility of the student to complete the listed prerequisite of any course before registering for it. Please consult with the undergraduate advisor should there be any questions about the curriculum.

Capstone requirements:

To enroll in POLS 478, internship and UCC Tier 3 capstone option, students must have:
- Declared an intent to complete the internship option upon completion of 60 credits
- Met with the internship coordinator
- Completed the Intern-Ready program

To enroll in POLS 404, senior thesis and UCC Tier 3 capstone option, students must have:
- Declared intention to complete the thesis option upon completion of 60 credits
- Met with thesis advisor
- An approved thesis proposal

All students will be required to take the Major Field Exam in Political Science before graduation.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 130</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 210</td>
<td>Political Science Research Methods</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Language requirement</td>
<td>3-11</td>
</tr>
</tbody>
</table>

The major requires intermediate proficiency in a major language (Arabic, Chinese, French, German, Japanese, or Spanish) or a major classical language (Latin) by earning advanced placement or enrolling in and passing one course at the 201 level or above. Modern language courses taught in English are excluded. To enroll in 201-level language courses, students must achieve appropriate placement scores or complete prerequisite 100-level courses.
## CONCENTRATION 1: POLITICAL SCIENCE, 33 CREDITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 237</td>
<td>State and Local Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 280</td>
<td>Comparative Political Systems</td>
<td>3</td>
</tr>
<tr>
<td>POLS 293</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 312</td>
<td>Early Western Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLS 313</td>
<td>Modern Western Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLS 342</td>
<td>Problems in Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 350</td>
<td>Public Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 15**

- 3 credits from senior capstone
- POLS 478 Practical Experience in Government, Politics, or Public Service (3 TO 6)
- POLS 404 Senior Thesis in Government and Politics (3)

**Subtotal: 3**

Students must select a senior capstone option upon completion of 60 total credits.

- 9 credits from any 300- and 400-level POLS electives (excluding 312, 342, 350, 404, 478)

**Subtotal: 9**

- 6 credits from
  - ECON 311 Environmental Economics (3)
  - ECON 331 Labor Economics (3)
  - ECON 345 The Economics of Government Budgets (3)
  - ECON 346 Economic Analysis of Legal Issues (3)
  - ECON 348 Health Economics (3)
  - ECON 351 International Economics (3)
  - ECON 370 Industrial Organization (3)
  - ECON 371 Economics Games of Strategy (3)

**Subtotal: 6**

ECON 201, Elementary Microeconomics, is the prerequisite for each of the above ECON electives.

Subtotal: 42-50

## CONCENTRATION 2: ECONOMICS, 33 CREDITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 237</td>
<td>State and Local Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 280</td>
<td>Comparative Political Systems</td>
<td>3</td>
</tr>
<tr>
<td>POLS 293</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 312</td>
<td>Early Western Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLS 313</td>
<td>Modern Western Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLS 342</td>
<td>Problems in Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 350</td>
<td>Public Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 15**

- 3 credits from senior capstone
- POLS 404 Senior Thesis in Government and Politics (3)
- POLS 478 Practical Experience in Government, Politics, or Public Service (3 TO 6)
- EURO 369 Professional Experience (3)
- EURO 479 Practical Experience (3)

**Subtotal: 3**
Students must select a senior capstone option upon completion of 60 total credits.

15 credits from
POLS 384 Politics in the British Isles 3
POLS 385 Politics of the European Union 3
POLS 392 The United Nations and International Organization 3
POLS 394 International Relations in Asia 3
POLS 482 Government and Politics of Western Europe 3
POLS 486 Politics of Russia and the Successor States 3
POLS 488 Government and Politics of China 3
POLS 490 International Law 3
POLS 493 World Politics 3
POLS 494 Politics of Terrorism 3
POLS 495 Foreign Policy of China 3

Subtotal: 15

Subtotal: 42-50

MINOR IN POLITICAL SCIENCE

21 CREDITS

Required Courses
POLS 130 American National Government 3
POLS 210 Political Science Research Methods 3

12 credits from
POLS 237 State and Local Politics 3
POLS 280 Comparative Political Systems 3
POLS 293 International Relations 3
POLS 312 Early Western Political Thought 3
or
POLS 313 Modern Western Political Thought 3
POLS 342 Problems in Public Policy 3
POLS 350 Public Administration 3

Subtotal: 12

3 credits from POLS

Subtotal: 15

Teacher Education

TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)

99 CREDITS

(See Teaching Major in Social Studies, College of Sciences and Humanities (p. 162) for total requirements for this area.)

Government area, 15 credits
POLS 130 American National Government 3
POLS 237 State and Local Politics 3
POLS 312 Early Western Political Thought 3
or
POLS 313 Modern Western Political Thought 3

6 credits from
POLS 210 Political Science Research Methods 3
POLS 280 Comparative Political Systems 3
POLS 293 International Relations 3
POLS 342 Problems in Public Policy 3

Subtotal: 15

PSYCHOLOGICAL SCIENCE

G. Mittleman, Chairperson
bsu.edu/psysc

Psychology is a science that studies behavior and mental processes. Psychologists study individual differences in personality and cognitive abilities, social and biological influences on behavior, and the effects of development and learning on the individual. The study of psychology can help students understand both their own motivations and the behavior of others.

The department offers a program of study that is intended to serve students with a variety of career goals. Some students seek employment immediately following graduation. Others use the major as preparation for graduate study or for a career as a high school social studies or psychology teacher. In addition to a basic understanding of psychological science in both laboratory and experiential settings, the undergraduate program is designed to promote the development of critical thinking and communication skills, technological and diversity competencies, and personal and professional ethics.

The courses students select within the major should be driven by their educational goals. Whether students intend to pursue employment or graduate study, they should consult with their primary advisor regarding course selection. Their primary advisor may also be helpful in
choosing a minor that will further their professional and personal objectives. Students are also assigned a faculty advisor, with whom students should consult for graduate school or career-related questions, issues, or advice. Students interested in teaching psychology at the high school level may complete a social studies major with a concentration in psychology.

**MAJOR IN PSYCHOLOGY (BA/BS)**

**42 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 125</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 241</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 284</td>
<td>Research Methods in Psychological Science</td>
<td>4</td>
</tr>
<tr>
<td>PSYS 285</td>
<td>Professional Ethics in Psychology</td>
<td>1</td>
</tr>
<tr>
<td>PSYS 295</td>
<td>Career Planning in Psychology</td>
<td>1</td>
</tr>
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</table>

3 credits from Individual Differences Foundation Area

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSYS 316</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 317</td>
<td>Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 318</td>
<td>Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 321</td>
<td>Developmental Psychology</td>
<td>3</td>
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</table>

Subtotal: 3

3 credits from Learning and Cognition Foundation Area

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYS 363</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 364</td>
<td>Psychology of Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 371</td>
<td>Applied Behavior Analysis</td>
<td>3</td>
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Subtotal: 3

3 credits from Diversity Foundation Area

<table>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 325</td>
<td>Psychology of Prejudice and Discrimination</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 326</td>
<td>Psychology of Diversity</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

3 credits from Biological Foundation Area

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYS 362</td>
<td>Motivation and Emotion</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 367</td>
<td>Introduction to Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 368</td>
<td>Sensation and Perception</td>
<td>3</td>
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</table>

Subtotal: 3

3 credits from Capstone Experience

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYS 492</td>
<td>Research Seminar</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 499</td>
<td>Department Honors in Psychology</td>
<td>1 to 2</td>
</tr>
</tbody>
</table>

Subtotal: 3

6 credits at 300- or 400-level PSYS
(no more than 3 credits from PSYS 478, PSYS 479, PSYS 497, or PSYS 498)

Subtotal: 6

6 credits at 400-level PSYS
(no more than 3 credits from PSYS 478, PSYS 479, PSYS 497, or PSYS 498)

Subtotal: 6

Subtotal: 42

Students must earn a grade of C or better in MATH 125.

**Teacher Education**

**TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)**

**99 CREDITS**

(See Teaching Major in Social Studies, College of Sciences and Humanities (p. 162) for total requirements for this area.)

Psychology area, 15 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PSYS 100</td>
<td>Introduction to Psychological Science</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 493</td>
<td>Teaching of Psychology 1</td>
<td>1</td>
</tr>
<tr>
<td>PSYS 494</td>
<td>Teaching of Psychology 2</td>
<td>2</td>
</tr>
</tbody>
</table>

3 credits from

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYS 367</td>
<td>Introduction to Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 468</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

3 credits from

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSYS 362</td>
<td>Motivation and Emotion</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 363</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 364</td>
<td>Psychology of Learning</td>
<td>3</td>
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</table>

Subtotal: 3

3 credits from

<table>
<thead>
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<th>Course Code</th>
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<tbody>
<tr>
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<td>Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 318</td>
<td>Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Subtotal: 15

Each student’s program of study must include at least one of the following courses: PSYS 318, 363, or 468. Each
student must satisfactorily complete a Psychological Science Teacher Education Portfolio in accordance with the standards published by the department.

**SOCIOLGY**

C. Menning, Chairperson  
bsu.edu/sociology

Sociology is the systematic study of human society and social interaction. Sociologists study the effects of groups upon individuals, interactions among groups and organizations, and cultural beliefs that direct human behavior within a local and global context. Sociological research involves collecting information about social processes, which is used to test and develop sociological theories.

Through their course work, sociology majors develop practical skills in writing, analytical and critical thinking, problem solving, data analysis, and research methods, which are valued and sought after in the job market. In addition to these skills, a degree in sociology provides students with the ability to consider social issues within the context of society as a whole and in relation to complex social systems. Ultimately students leave with the knowledge and skill to influence change in the world.

Sociology majors find employment in business, non-profit, human resources, and government organizations. Many students pursue advanced degrees in sociology while others find themselves well prepared for graduate study in urban planning, institutional research, social work, non-profit management, counseling, law, and business.

**MAJOR IN SOCIOLOGY (BA/BS)**

**37 CREDITS**

Core requirements, 16 credits  
SOC 100 Principles of Sociology 3  
SOC 200 Sociological Thinking 1  
SOC 380 Sociological Research Methods 3  
SOC 382 Applied Social Statistics 3  
SOC 402 Sociological Theory 3  
SOC 492 Capstone Course in Sociology 3

21 credits of electives in SOC (at least 12 credits must be at the 300-400 level)

Subtotal: 19

Students must earn a grade of C or better in SOC 100, SOC 380, SOC 382, SOC 402, SOC 492 for the course to count toward major requirements.

3 credits from  
SOC 227 Spirituality, Self, and Society 3  
SOC 427 Sociology of Religions 3

3 credits from  
SOC 221 Introduction to Race and Ethnic Relations 3  
SOC 421 Racial and Cultural Minorities in the United States 3

3 credits from  
SOC 235 Sociology of Gender 3  
SOC 434 Sociology of Human Sexuality 3

9 credits of electives in SOC (at least 12 credits from directed electives and electives must be at the 300-400 level)

Subtotal: 9

Concentration: Health and Populations, 37 credits

Core requirements, 16 credits  
SOC 100 Principles of Sociology 3  
SOC 200 Sociological Thinking 1  
SOC 380 Sociological Research Methods 3  
SOC 382 Applied Social Statistics 3  
SOC 402 Sociological Theory 3  
SOC 492 Capstone Course in Sociology 3

Additional requirements  
SOC 341 Sociology of Health and Illness 3

Subtotal: 19

Students must earn a grade of C or better in SOC 100, SOC 380, SOC 382, SOC 402, SOC 492 for the course to count toward major requirements.

9 credits from  
SOC 431 Aging and the Life Course 3  
SOC 433 Sociology of Mental Health 3
SOC 434       Sociology of Human Sexuality      3
SOC 470       Population Dynamics and        3
              Demographic Methods

9 credits of electives in SOC (at least 12 credits from directed electives and electives must be at the 300-400 level)

Subtotal: 9

Subtotal: 37

MINOR IN SOCIOLOGY

15 CREDITS

Required Courses
SOC 100       Principles of Sociology        3
12 credits of electives in SOC (at least 6 credits must be at the 300-400 level)

Subtotal: 15

Teacher Education

TEACHING MAJOR IN SOCIAL STUDIES (BA/BS)

99 CREDITS

(See Teaching Major in Social Studies, College of Sciences and Humanities (p. 162) for total requirements for this area.)

Sociology area, 15 credits
SOC 100       Principles of Sociology        3
6 credits from
SOC 235       Sociology of Gender            3
SOC 242       Social Problems                3
SOC 260       Social Interaction             3
SOC 343       Deviance                       3

Subtotal: 6

6 credits from
SOC 320       Social Inequality               3
SOC 328       Globalization and the Social World 3
SOC 421       Racial and Cultural Minorities in the United States 3
SOC 424       Family                         3
SOC 427       Sociology of Religions          3
SOC 470       Population Dynamics and Demographic Methods 3

Subtotal: 6

Group 1: WGS electives, 3 credits from
WGS 210       Introduction to Women's and Gender Studies 3
WGS 220       International Women's Issues       3
WGS 410       Feminist Theory                  3
WGS 499       Women's and Gender Studies Capstone 3

WGS 310       Special Topics in Women's and Gender Studies 3
WGS 369       Paid Internship                  1 TO 6
WGS 479       Unpaid Internship               1 TO 6
WGS 498       Independent Study               1 TO 3

Subtotal: 3

Group 2: Humanities and fine arts electives, 3 credits from
AHS 265       Feminist Art History             3
CC 302        Women in Antiquity               3
COMM 385      Rhetoric of Marginalized Voices 3
ENG 214       Introduction to Literature and Gender 3
ENG 217       Introduction to Queer Literature and Queer Theory 3
ENG 328       Language and Gender              3
ENG 490       Literature and Gender           3

Each student must satisfactorily compile artifacts from sociology courses for the Social Science Teacher Education Portfolio in accordance with department standards.

WOMEN’S AND GENDER STUDIES

L. Pellerin, Director

The interdisciplinary major and minor in women’s and gender studies are designed to offer students a comprehensive program for the investigation of women’s and men’s gendered experiences and an introduction to the theories and methods of the discipline of women’s and gender studies. Attention is paid to intersections of gender with culture and belief, sexuality and sexual orientation, race/ethnicity, class, age, and ability.

For more information, contact the Women’s and Gender Studies program at 765-285-5451.

MAJOR IN WOMEN’S AND GENDER STUDIES (BA/BS)

36 CREDITS

Required Courses
WGS 210       Introduction to Women's and Gender Studies 3
WGS 220       International Women's Issues       3
WGS 410       Feminist Theory                  3
WGS 499       Women's and Gender Studies Capstone 3

WGS 310       Special Topics in Women's and Gender Studies 3
WGS 369       Paid Internship                  1 TO 6
WGS 479       Unpaid Internship               1 TO 6
WGS 498       Independent Study               1 TO 3

Subtotal: 3

Group 2: Humanities and fine arts electives, 3 credits from
AHS 265       Feminist Art History             3
CC 302        Women in Antiquity               3
COMM 385      Rhetoric of Marginalized Voices 3
ENG 214       Introduction to Literature and Gender 3
ENG 217       Introduction to Queer Literature and Queer Theory 3
ENG 328       Language and Gender              3
ENG 490       Literature and Gender           3
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 494</td>
<td>Queer Literature/Queer Theory</td>
<td>3</td>
</tr>
<tr>
<td>HIST 215</td>
<td>Women in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 452</td>
<td>Women in Modern European History</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 380</td>
<td>Justice</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 406</td>
<td>Feminist Ethics and Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>RELS 206</td>
<td>Sex and the Bible</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 3</td>
<td></td>
</tr>
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</table>

**Group 3: Social and biological sciences electives, 3 credits from**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 241</td>
<td>Gender, Sex, and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>CJC 211</td>
<td>Race, Gender, and Crime</td>
<td>3</td>
</tr>
<tr>
<td>CJC 332</td>
<td>Victimology</td>
<td>3</td>
</tr>
<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
</tr>
<tr>
<td>HSC 372</td>
<td>Women and Health</td>
<td>3</td>
</tr>
<tr>
<td>POLS 241</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>POLS 474</td>
<td>Women and Politics</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 326</td>
<td>Psychology of Diversity</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 377</td>
<td>Psychology of Sexual Behavior</td>
<td>3</td>
</tr>
<tr>
<td>SOC 235</td>
<td>Sociology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>SOC 424</td>
<td>Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC 434</td>
<td>Sociology of Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 250</td>
<td>Human Behavior and the Social Environment 1</td>
<td>3</td>
</tr>
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<td><strong>Subtotal:</strong> 3</td>
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</table>

15 additional credits from at least 2 of the groups (at least 12 credits must be at the 300-400 level)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 15</td>
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Subtotal: 36

Students may earn no more than 6 internship credits. WGS 499 should be taken at the completion of the program. Students should refer to individual course descriptions for information about prerequisites. Other relevant electives may be substituted with the approval of the program director. For advising, contact the Women's and Gender Studies program office, BB 108, 765-285-5451.

**MINOR IN WOMEN'S AND GENDER STUDIES**

**18 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>WGS 210</td>
<td>Introduction to Women's and Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGS 499</td>
<td>Women's and Gender Studies</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Capstone</strong></td>
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<tr>
<td></td>
<td>12 credits from the following, with no more than 6 credits from any one department</td>
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<tr>
<td>AHS 265</td>
<td>Feminist Art History</td>
<td>3</td>
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<td>ANTH 241</td>
<td>Gender, Sex, and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>CC 302</td>
<td>Women in Antiquity</td>
<td>3</td>
</tr>
<tr>
<td>CJC 211</td>
<td>Race, Gender, and Crime</td>
<td>3</td>
</tr>
<tr>
<td>CJC 332</td>
<td>Victimology</td>
<td>3</td>
</tr>
<tr>
<td>COMM 385</td>
<td>Rhetoric of Marginalized Voices</td>
<td>3</td>
</tr>
<tr>
<td>ENG 214</td>
<td>Introduction to Literature and Gender</td>
<td>3</td>
</tr>
<tr>
<td>ENG 217</td>
<td>Introduction to Queer Literature and Queer Theory</td>
<td>3</td>
</tr>
<tr>
<td>ENG 328</td>
<td>Language and Gender</td>
<td>3</td>
</tr>
<tr>
<td>ENG 490</td>
<td>Literature and Gender</td>
<td>3</td>
</tr>
<tr>
<td>ENG 494</td>
<td>Queer Literature/Queer Theory</td>
<td>3</td>
</tr>
<tr>
<td>HIST 215</td>
<td>Women in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 452</td>
<td>Women in Modern European History</td>
<td>3</td>
</tr>
<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
</tr>
<tr>
<td>HSC 372</td>
<td>Women and Health</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 380</td>
<td>Justice</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 406</td>
<td>Feminist Ethics and Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>POLS 241</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>POLS 474</td>
<td>Women and Politics</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 326</td>
<td>Psychology of Diversity</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 377</td>
<td>Psychology of Sexual Behavior</td>
<td>3</td>
</tr>
<tr>
<td>RELS 206</td>
<td>Sex and the Bible</td>
<td>3</td>
</tr>
<tr>
<td>SOC 235</td>
<td>Sociology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>SOC 424</td>
<td>Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC 434</td>
<td>Sociology of Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 250</td>
<td>Human Behavior and the Social Environment 1</td>
<td>3</td>
</tr>
<tr>
<td>WGS 220</td>
<td>International Women's Issues</td>
<td>3</td>
</tr>
<tr>
<td>WGS 310</td>
<td>Special Topics in Women's and Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGS 410</td>
<td>Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGS 498</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
<tr>
<td>WGS 369</td>
<td>Paid Internship</td>
<td>1-6</td>
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</table>
or

WGS 479  Unpaid Internship  1 TO
6

Subtotal: 12

Subtotal: 18

Students may earn no more than 6 internship credits. WGS 499 should be taken at the completion of the program. It is strongly suggested that students balance their programs with at least one elective from the humanities and one elective from the biological and social sciences. Students should refer to individual course descriptions for information about prerequisites. Other relevant electives may be substituted with the approval of the program director. For advising, contact the Women’s and Gender Studies program office, BB 108, 765-285-5451.
Teachers College

R. Weaver, Interim Dean; S. Tancock, Associate Dean; D. McIntosh, Associate Dean
bsu.edu/teachers

Teachers College Mission and Vision
Teachers College is committed to excellence in P-12 and adult/higher education through its student-centered and community-engaged preparation of outstanding professional educators and human service providers, supporting their induction and continuing education, promoting research and development, and influencing policy that enables high quality educational outcomes. Teachers College aspires to transform entrepreneurial learners into educational leaders who are sensitive and responsive to diversity and the contextual foundations of teaching, learning and human development.

INTERDEPARTMENTAL PROGRAMS

DUAL MAJOR IN EARLY CHILDHOOD AND EARLY CHILDHOOD SPECIAL EDUCATION (BA/BS)

113 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 100</td>
<td>Introduction to Art</td>
<td>3</td>
</tr>
<tr>
<td>BIO 102</td>
<td>Biological Concepts for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 200</td>
<td>Planning for the Elementary and Early Childhood Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 231</td>
<td>Family and Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 244</td>
<td>Early and Elementary Education for Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 252</td>
<td>Creative Experiences for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 301</td>
<td>Teaching in the Pre-Kindergarten/Kindergarten Program</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 351</td>
<td>Teaching in the Kindergarten/Primary Program</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 381</td>
<td>Early Childhood Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 400</td>
<td>Student Teaching: Pre-Kindergarten</td>
<td>6 TO 12</td>
</tr>
<tr>
<td></td>
<td>or Student Teaching: Kindergarten</td>
<td>6 TO 12</td>
</tr>
<tr>
<td>ECYF 401</td>
<td>Student Teaching: Primary Grades</td>
<td>6 TO 12</td>
</tr>
<tr>
<td>ECYF 442</td>
<td>Administration of Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 260</td>
<td>Human Growth and Development for Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 393</td>
<td>Educational Psychology for Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 204</td>
<td>Literature for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 390</td>
<td>Early Emergent Literacy</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 430</td>
<td>Assessment and Intervention in Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological Environment</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
</tr>
<tr>
<td>HSC 350</td>
<td>Elementary School Health Program</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Data Analysis, Geometry, and Measurement for the Elementary Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 391</td>
<td>Teaching and Learning Mathematics in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 265</td>
<td>Basic Music for Classroom Teachers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 101</td>
<td>Physical Science Concepts for Teachers</td>
<td>1 TO</td>
</tr>
<tr>
<td>SCI 398</td>
<td>Teaching Science in the Early and Primary Grades</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 201</td>
<td>Introduction to Students With Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 202</td>
<td>Legal and Procedural Foundations of Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 210</td>
<td>Theory and Practices in Early</td>
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### Childhood Special Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SPCE 215</td>
<td>Assessment of Young Children With Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 311</td>
<td>Developmental Methods for Infants and Toddlers with Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 312</td>
<td>Developmental Methods for Preschool Children with Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 331</td>
<td>Technology in Education</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>SPCE 417</td>
<td>Practicum: Infants/Toddlers and Preschoolers with Special Needs</td>
<td>1 TO 6</td>
</tr>
<tr>
<td>SS 398</td>
<td>Teaching Social Studies in Early Childhood/Kindergarten-Grade 3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 113**

These major courses, AHS 100, BIO 102, GEOG 101, GEOL 101, HIST 201, MATH 201, MUSE 265, PHYC 101 also fill a University Core Curriculum requirement.

### DUAL MAJOR IN ELEMENTARY EDUCATION—SPECIAL EDUCATION, EXCEPTIONAL NEEDS (BA/BS)

#### 116-118 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 100</td>
<td>Introduction to Art</td>
<td>3</td>
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<tr>
<td>BIO 102</td>
<td>Biological Concepts for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 200</td>
<td>Planning for the Elementary and Early Childhood Classroom</td>
<td>3</td>
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<tr>
<td>EDEL 244</td>
<td>Early and Elementary Education for Social Justice</td>
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</tr>
<tr>
<td>EDEL 300</td>
<td>Management, Organization, and Instruction in the Elementary Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 350</td>
<td>Teaching in the Elementary Education Classroom</td>
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</tr>
<tr>
<td>EDEL 464</td>
<td>Student Teaching: Elementary</td>
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<tr>
<td>EDFS 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
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<td>EDPS 260</td>
<td>Human Growth and Development for Elementary Education</td>
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<td>EDPS 393</td>
<td>Educational Psychology for Elementary Education</td>
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<tr>
<td>EDRD 204</td>
<td>Literature for Children</td>
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<td>EDRD 300</td>
<td>Reading and Language Instruction in the Elementary Classroom</td>
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<td>EDRD 350</td>
<td>Advanced Reading and Language Arts Instruction in the Elementary Classroom</td>
<td>3</td>
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<td>EDRD 430</td>
<td>Assessment and Intervention in Elementary Schools</td>
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<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
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<td>Planet Earth's Geological Environment</td>
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<td>HIST 201</td>
<td>American History, 1492-1876</td>
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<td>HSC 350</td>
<td>Elementary School Health Program</td>
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<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
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<td>MATH 202</td>
<td>Data Analysis, Geometry, and Measurement for the Elementary Teacher</td>
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<td>MATH 391</td>
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<td>MUSE 265</td>
<td>Basic Music for Classroom Teachers</td>
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</tr>
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<td>PHYC 101</td>
<td>Physical Science Concepts for Teachers</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>SCI 397</td>
<td>Teaching Science in the Elementary School</td>
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<tr>
<td>SPAA 270</td>
<td>Language Development</td>
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<td>SPCE 201</td>
<td>Introduction to Students With Exceptional Needs</td>
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<td>SPCE 202</td>
<td>Legal and Procedural Foundations of Special Education</td>
<td>3</td>
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<tr>
<td>SPCE 331</td>
<td>Technology in Education</td>
<td>1 TO 3</td>
</tr>
<tr>
<td>SPCE 361</td>
<td>Advanced Practicum in Special Education</td>
<td>1 TO 6</td>
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<tr>
<td>SS 397</td>
<td>Teaching Social Studies in the Elementary School</td>
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**Subtotal: 89-91**

Mild Interventions (Early and Middle Childhood), 27 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDPS 345</td>
<td>Educational Tests and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 277</td>
<td>Human Relations, Collaboration, and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 309</td>
<td>Principles of Applied Behavior Analysis for Special Education</td>
<td>3</td>
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</tbody>
</table>
SPCE 371 Introduction to Mild Interventions 3
SPCE 375 Assessment in Special Education, Including Response to Intervention 3
SPCE 376 Teaching Methods in Mild Interventions K-12 3
SPCE 489 Student Teaching: Mild Disabilities 1 TO 12
SPCE elective 3

Subtotal: 116-118

See Professional Education Assessment/Decision Points (p. 234) for additional information.

TEACHER LICENSING

The Ball State University programs for the preparation of teachers and other public school personnel meet the standards of the Rules for Educator Preparation and Accountability (REPA), the policies of the Office of Educator Effectiveness and Licensing (OEEL) and the Indiana Department of Education.

The teacher education programs meet the academic requirements for the initial teaching license. These programs are also accredited by the Council for the Accreditation of Educator Preparation (CAEP) and the Higher Learning Commission, providing added benefits to students and graduates in terms of transfer of credit, recognition of degrees, and reciprocity of teacher licenses. Under the Licensure Framework of OEEL the teaching license will reflect the standards for which the candidate has demonstrated competency through the completion of a degree program. The license will state (1) the content area(s) that the candidate is licensed to teach and (2) the school setting(s) in which the candidate is licensed to teach.

Application for Teaching License

Any teaching assignment as a professional teacher in a state-approved school requires a teaching license based upon the recommendation of the teacher preparation institution, except for testing additions. An institutional recommendation is based upon meeting the REPA standards, OEEL policies required for the licensure program, and successful performance on all required assessments in the Ball State Unit Assessment System. Details regarding the REPA standards and assessments for specific licensure areas may be found by consulting the OTES-CP website (http://cms.bsu.edu/academics/collegesanddepartments/teachers/currentstudents/otes/testrequirements).

Students should apply for the Indiana instructional license through the Indiana Department of Education’s Licensing Verification and Information System (LVIS) no earlier than the completion of all academic requirements and always after the completion of all licensing examinations. According to state statute, candidates for licensure must provide evidence of current (through state approved agencies) CPR/AED certification and documentation that they have completed suicide prevention training (through state approved agencies) prior to license recommendation.

Applicants for teacher licensing in other states requiring the recommendation of Ball State University must also submit such applications to the Office of Teacher Education Services and Clinical Practice. The Initial Practitioner license issued by the OEEL is valid for two years in Indiana. The beginning teacher must successfully complete the Indiana Residency Program (formerly IMAP) or 40 professional growth points (PGPs) after verifying two years of full-time teaching experience. At that time, a Proficient Practitioner license is awarded, which is valid for five years. Renewal of the Proficient Practitioner license and awarding of the Accomplished Practitioner license is achieved through a program of continuing professional development based on the OEEL standards or six hours of course work at Ball State University. To be recommended for renewal by Ball State University through coursework, one must have completed at least half of their renewal credits at Ball State.

A person who has earned a bachelor’s degree and who wants to complete requirements for an Indiana teaching license or add a teaching area to a license must be evaluated and advised for admission to a postgraduate program by the Office of Teacher Education Services and Clinical Practice.

A student holding a bachelor’s degree from an accredited Indiana institution other than Ball State, who wants to be recommended for a teaching license by Ball State University, must be admitted as a regular graduate or postgraduate licensing ONLY student and must meet the requirements of the approved university teacher education program.

School Services Initial Practitioner License

School Counselor

Upon completion of a bachelor’s degree, persons interested in pursuing school counselor licenses must apply to the Graduate School to be admitted to graduate study. After being admitted to graduate study, an application must be made to the Department of Counseling Psychology and Guidance Services to pursue the master’s degree in Counseling (School Concentration). Completion of this master’s degree, and passing the appropriate Pearson content exam, allows for the recommendation for a school counselor’s license. According to state statute, candidates for licensure must provide evidence of current CPR/AED certification (through state approved agencies) and documentation that they have completed suicide prevention training.
prevention training (through state approved agencies) prior to license recommendation.

**School Psychologist**

This license will require a minimum of 70 graduate semester hours in School Psychology or a related field. The school psychologist license will state P-12 under school settings, since the standards ensure that the school psychologist will be well versed in curriculum, pedagogy, and student characteristics of all development levels. According to state statute, candidates for licensure must provide evidence of current CPR/AED (through state approved agencies) certification documentation that they have completed suicide prevention training (through state approved agencies) prior to license recommendation.

**Professional Education Assessment/Decision Points**

**Decision Point 1:**

**Admission to the Teacher Preparation Program**

For admission to the teacher preparation program and to register for 300- and 400-level professional education courses required for the teaching major, students must have:

- earned grades of C or better in designated 100- and 200-level professional education courses required for the teaching major, and COMM 210 or equivalent;
- earned an overall grade-point average of at least 2.5;
- passed the Core Academic Skills Assessment (CASA); SAT, GRE, or ACT scores may substitute for CASA under some circumstances;
- satisfied course and assessment requirements specified by the student’s licensure area. For specific requirements, students should see their DegreeWorks and Tk20 profile.

**Decision Point 2:**

**Admission to Student Teaching**

To register for student-teaching courses, students must have:

- earned grades of C or better in all professional education courses required for the teaching major;
- earned an overall grade-point average of at least 2.5;
- earned grade-point averages of at least 2.5 in professional education courses and at least 2.5 in the teaching major;
- satisfied course and assessment requirements specified by the student’s licensure area. For specific requirements, students should see their DegreeWorks and Tk20 profiles;
- an approved application for student teaching.

**Decision Point 3**

**Recommendation for Graduation**

To be recommended for graduation, candidates must have:

- earned credit in student teaching;
- completed all requirements for graduation with an overall grade-point average of at least 2.5, a grade-point average of at least 2.5 in all professional education courses, and a grade-point average of at least 2.5 in the teaching major.

**Recommendation for Licensure**

In addition, to be recommended for licensure, candidates must have:

- passed the Indiana Academic Core Assessments in the appropriate Developmental (Pedagogy) Area and Content Area;
- provided evidence of current CPR/AED certification (through state approved agencies) prior to license recommendation;
- provided evidence of completion of suicide prevention training (through state approved agencies) prior to license recommendation.

**Initial Instructional and Addition, Licensure Programs**

<table>
<thead>
<tr>
<th>Teaching Majors*</th>
<th>IDOE Approved Educator Preparation Programs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education</td>
<td>Visual Arts (K-12)</td>
</tr>
<tr>
<td>Chemistry Education</td>
<td>Science: Chemistry (5-12)</td>
</tr>
<tr>
<td>Early Childhood Special Education</td>
<td>Exceptional Needs: Mild Intervention (K-6)</td>
</tr>
<tr>
<td>Early Child Education</td>
<td>Early Childhood Education (P-3)</td>
</tr>
<tr>
<td>Earth/Space Science</td>
<td>Science: Earth/Space Science (5-12)</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>Elementary Generalist (K-6)</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>Language Arts (5-12)</td>
</tr>
<tr>
<td>Exceptional Needs: Mild Interventions</td>
<td>Exceptional Needs: Mild Intervention (P-12)</td>
</tr>
<tr>
<td>Exceptional Needs: Intense Interventions</td>
<td>Exceptional Needs: Intense Intervention (P-12)</td>
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<td>Program</td>
<td>Courses</td>
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<td>----------------------------------------------</td>
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<tr>
<td>Exceptional Needs: Hearing Impaired/Deaf</td>
<td>Exceptional Needs: Deaf and Hard of Hearing (P-12)</td>
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<tr>
<td>Foreign Language Teaching (French, German, Japanese, Latin, Spanish)</td>
<td>World Languages: French (5-12)</td>
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<td></td>
<td>World Languages: German (5-12)</td>
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<tr>
<td></td>
<td>World Languages: Japanese (5-12)</td>
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<td>World Languages: Latin (5-12)</td>
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<td>World Languages: Spanish (5-12)</td>
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<td></td>
<td>Foreign Language Teaching</td>
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<td>World Languages: French (5-12)</td>
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<td>World Languages: Japanese (5-12)</td>
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<td>World Languages: Latin (5-12)</td>
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<td>World Languages: Spanish (5-12)</td>
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<td>Health and Physical Education</td>
<td>Health Education (5-12)</td>
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<td>Physical Education (P-12)</td>
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<tr>
<td>Journalism Education</td>
<td>Journalism (5-12)</td>
</tr>
<tr>
<td>Life Science Education</td>
<td>Science: Life Science (5-12)</td>
</tr>
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<td>Mathematics Teaching</td>
<td>Mathematics (5-9)</td>
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<td>Mathematics (5-12)</td>
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<td>Music Education</td>
<td>Fine Arts: Instrumental and General Music (P-12)</td>
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<td>Fine Arts: Vocal and General Music (P-12)</td>
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<td>Physics Education</td>
<td>Science: Physics (5-12)</td>
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<td>Social Studies Education</td>
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<td></td>
<td>Economics (5-12)</td>
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<td>Social Studies: Geographical Perspectives (5-12)</td>
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<td>Social Studies: Government and Citizenship (5-12)</td>
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<td></td>
<td>Social Studies: Historical Perspectives (5-12)</td>
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<td></td>
<td>Social Studies:</td>
</tr>
</tbody>
</table>

*https://www.bsu.edu/academics/undergraduatestudy/majors
***https://www.bsu.edu/academics/collegesanddepartments/teachers-college/become-a-teacher
****https://www.bsu.edu/academics/collegesanddepartments/teachers-college/become-a-teacher
EARLY CHILDHOOD, YOUTH, AND FAMILY STUDIES

S. Hall, Chairperson

The Department of Early Childhood, Youth, and Family Studies includes programs that promote the development, education, and well-being of children from birth through adolescence and that foster healthy family functioning. Our impactful programs provide students with valuable training for real-world application, be it in the classroom, community, or the home.

The Early Childhood Education programs focus on the preparation of teachers for preschool and K-3 classrooms, with an emphasis on engaging with families and community. Options are available for a licensure (“Teaching Major in Early Childhood Education”) and non-licensure (“Major in Early Childhood with Minor in Early Childhood Special Education”).

The Family and Child program includes three interrelated concentrations: child development, child life, and family studies. Students graduate equipped to work in a variety of settings—from child care centers to hospitals to family service agencies—or primed to pursue graduate or doctoral studies. Minors and a certificate are available that add supplemental preparation for non-major students who will work with children or families.

MAJOR IN EARLY CHILDHOOD WITH MINOR IN EARLY CHILDHOOD SPECIAL EDUCATION (PRE-K ONLY TRACK—NO LICENSE) CONCENTRATION (BA/BS)

90 CREDITS

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDEL 100</td>
<td>Education in a Democratic Society</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 200</td>
<td>Planning for the Elementary and Early Childhood Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 231</td>
<td>Family and Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 244</td>
<td>Early and Elementary Education for Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 252</td>
<td>Creative Experiences for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 260</td>
<td>Early Childhood Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 301</td>
<td>Teaching in the Pre-Kindergarten/Kindergarten Program</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 310</td>
<td>Promoting Prosocial Behavior in Young Children: Guidance and Cultural Factors</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 315</td>
<td>Infant Toddler Curriculum and Environment</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 330</td>
<td>Health and Well Being in Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 345</td>
<td>Culture and Language in Teaching and Learning</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 381</td>
<td>Early Childhood Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 442</td>
<td>Administration of Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 491</td>
<td>Independent Study in Elementary Education</td>
<td>1-6</td>
</tr>
<tr>
<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 260</td>
<td>Human Growth and Development for Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 391</td>
<td>Learning and Assessment in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 204</td>
<td>Literature for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 318</td>
<td>Literature for Young Children</td>
<td>3</td>
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<td>EDRD 390</td>
<td>Early Emergent Literacy</td>
<td>3</td>
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<tr>
<td>MUSE 265</td>
<td>Basic Music for Classroom Teachers</td>
<td>3</td>
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<tr>
<td>SPCE 201</td>
<td>Introduction to Students With Exceptional Needs</td>
<td>3</td>
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<tr>
<td>SPCE 210</td>
<td>Theory and Practices in Early Childhood Special Education</td>
<td>3</td>
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<tr>
<td>SPCE 215</td>
<td>Assessment of Young Children With Exceptional Needs</td>
<td>3</td>
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<tr>
<td>SPCE 311</td>
<td>Developmental Methods for Infants and Toddlers with Exceptional Needs</td>
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<tr>
<td>SPCE 312</td>
<td>Developmental Methods for Preschool Children with Exceptional Needs</td>
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<tr>
<td>SPCE 417</td>
<td>Practicum: Infants/Toddlers and Preschoolers with Special Needs</td>
<td>1-6</td>
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</table>

Advisor approved elective: 12

Subtotal: 90

MUSE 265 also satisfies a University Core Curriculum requirement (Tier 2 Fine Arts/Design/Humanities and Writing emphasis course). EDFO 420 also satisfies a University Core Curriculum requirement (Tier 2 Natural Sciences/Social Sciences course).

MAJOR IN FAMILY AND CHILD (BA/BS)
### 63-66 Credits

Complete the following, 45 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 351</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 100</td>
<td>Introduction to Early Childhood, Youth, and Family Studies</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 202</td>
<td>Child and Family Wellness</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 250</td>
<td>Family Relations</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 265</td>
<td>Infant/Toddler Development and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 275</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 350</td>
<td>Families in Cross-Cultural Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 380</td>
<td>Parenting</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 393</td>
<td>Presentations, Practices and Techniques for Family Life</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 425</td>
<td>Grant Writing and Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 484</td>
<td>Family Stressors and Crisis</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 485</td>
<td>Family Policy</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 493</td>
<td>Internship in Family and Child</td>
<td>3 TO 9</td>
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</table>

Choose one area to complete the major:

#### Family and Child: Child development concentration, 18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECYF 260</td>
<td>Early Childhood Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 310</td>
<td>Promoting Prosocial Behavior in Young Children: Guidance and Cultural Factors</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 320</td>
<td>Leadership and Management in Child Development Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 442</td>
<td>Administration of Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 465</td>
<td>Advanced Child Development in Practice</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 210</td>
<td>Theory and Practices in Early Childhood Special Education</td>
<td>3</td>
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</table>

#### Family and Child: Child life concentration, 20 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANAT 201</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
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</table>

#### Family and Child: Family studies concentration, 21 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 355</td>
<td>Adult Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 431</td>
<td>Aging and the Life Course</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 340</td>
<td>Life and Workplace Management</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 394</td>
<td>Family Services Administration</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 475</td>
<td>Marriage</td>
<td>3</td>
</tr>
<tr>
<td>HSC 261</td>
<td>Health, Sexuality, and Family Life</td>
<td>3</td>
</tr>
<tr>
<td>or PSYS 377</td>
<td>Psychology of Sexual Behavior</td>
<td>3</td>
</tr>
<tr>
<td>SOCW 100</td>
<td>Introduction to Social Work</td>
<td>3</td>
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<tr>
<td>SOCW 325</td>
<td>Human Behavior and the Social Environment</td>
<td>3</td>
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</table>

#### Total Credit Hours: 63-66

### Minor in Family Engagement

#### 15 Credits

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECYF 250</td>
<td>Family Relations</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 380</td>
<td>Parenting</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 393</td>
<td>Presentations, Practices and Techniques for Family Life</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 394</td>
<td>Family Services Administration</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 484</td>
<td>Family Stressors and Crisis</td>
<td>3</td>
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</tbody>
</table>

Subtotal: **15**

This minor is not open to Family and Child majors.

### Minor in Infant and Toddler Specialization
## 15 CREDITS

**Requirements List**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECYF 202</td>
<td>Child and Family Wellness</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 310</td>
<td>Promoting Prosocial Behavior in Young Children: Guidance and Cultural Factors</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 315</td>
<td>Infant Toddler Curriculum and Environment</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 320</td>
<td>Leadership and Management in Child Development Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 380</td>
<td>Parenting</td>
<td>3</td>
</tr>
</tbody>
</table>

This program is offered online only. Students cannot earn both a Minor in Infant and Toddler Specialization and Certificate in Infant and Toddler Specialization. Not open to Family and Child majors.

Subtotal: 15

## TEACHING MAJOR IN EARLY CHILDHOOD EDUCATION (BIRTH-GRADE 3) (BA/BS)

### 102 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AHS 100</td>
<td>Introduction to Art</td>
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<tr>
<td>BIO 102</td>
<td>Biological Concepts for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 100</td>
<td>Introduction to Early Childhood, Youth, and Family Studies</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 265</td>
<td>Infant/Toddler Development and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 351</td>
<td>Teaching in the Kindergarten/Primary Program</td>
<td>3</td>
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<td>ECYF 400</td>
<td>Student Teaching: Pre-Kindergarten</td>
<td>6 TO 12</td>
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<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ECYF 401</td>
<td>Student Teaching: Kindergarten</td>
<td>6 TO 12</td>
</tr>
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<td></td>
<td>or</td>
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</tr>
<tr>
<td>ECYF 402</td>
<td>Student Teaching: Primary Grades</td>
<td>6 TO 12</td>
</tr>
<tr>
<td>ECYF 442</td>
<td>Administration of Early Childhood Programs</td>
<td>3</td>
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<td>EDEL 200</td>
<td>Planning for the Elementary and Early Childhood Classroom</td>
<td>3</td>
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<td>EDEL 244</td>
<td>Early and Elementary Education for Social Justice</td>
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<td>EDFS 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
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<td>EDPS 260</td>
<td>Human Growth and Development for Elementary Education</td>
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<td>EDPS 393</td>
<td>Educational Psychology for Elementary Education</td>
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<tr>
<td>EDRD 204</td>
<td>Literature for Children</td>
<td>3</td>
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<td>EDRD 318</td>
<td>Literature for Young Children</td>
<td>3</td>
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<td>EDRD 390</td>
<td>Early Emergent Literacy</td>
<td>3</td>
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<td>EDRD 430</td>
<td>Assessment and Intervention in Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
<td>3</td>
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<td>GEOL 101</td>
<td>Planet Earth's Geological Environment</td>
<td>3</td>
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<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
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<td>HSC 350</td>
<td>Elementary School Health Program</td>
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<tr>
<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
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<td>MATH 202</td>
<td>Data Analysis, Geometry, and Measurement for the Elementary Teacher</td>
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<td>MATH 391</td>
<td>Teaching and Learning Mathematics in the Elementary School</td>
<td>3</td>
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<td>MUSE 265</td>
<td>Basic Music for Classroom Teachers</td>
<td>3</td>
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<tr>
<td>PHYC 101</td>
<td>Physical Science Concepts for Teachers</td>
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<tr>
<td>SCI 398</td>
<td>Teaching Science in the Early and Primary Grades</td>
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<tr>
<td>SPCE 302</td>
<td>Teaching Students with Disabilities in the General Education Classroom</td>
<td>3</td>
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<tr>
<td>SS 398</td>
<td>Teaching Social Studies in Early Childhood/Kindergarten-Grade 3 Elective</td>
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Subtotal: 90

**Concentration**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ECYF 231</td>
<td>Family and Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 252</td>
<td>Creative Experiences for Young Children</td>
<td>3</td>
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<tr>
<td>ECYF 301</td>
<td>Teaching in the Pre-Kindergarten/Kindergarten Program</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 381</td>
<td>Early Childhood Language Arts</td>
<td>3</td>
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Subtotal: 12

Subtotal: 102
These major courses, AHS 100, BIO 102, GEOG 101 or GEOL 101, HIST 201, MATH 201, MUSE 265, PHYC 101 also fill a University Core Curriculum requirement.

CERTIFICATE IN INFANT/TODDLER SPECIALIZATION

18 credits
(See Certificates (p. 22).)

EDUCATIONAL FIELD EXPERIENCES

Pre-Student Teaching Educational Field Experiences
The purpose of pre-student teaching field experiences is to give students pursuing teacher education an intentional, systematic, planned sequence of experiences in appropriate educational settings. These experiences are designed to familiarize students with principles of classroom management and the teaching-learning process in practical and real school environments and to help them learn how to teach. The pre-student teaching field experiences culminate in EDEL 301, 350/351; EDJH 385; EDSE 380; SPCE 361, or departmental equivalents which require assignment to classrooms in appropriate educational settings for the semester to observe, prepare instructional presentations, and undertake other instructional tasks appropriate for students before student teaching.

The university provides laboratory settings for pre-student teaching educational field experiences in the on-campus Burris Laboratory School as well as in public school partners in Muncie and others within commuting distance.

Student Teaching
Student teaching in Indiana gives candidates an opportunity to develop teaching competence under the supervision of professionally licensed mentor teachers collaborating with the university in the student teaching program.

Performance in student teaching is assessed using a performance assessment instrument completed by the mentor teacher in collaboration with the University supervisor. The final grade in student teaching is recorded as credit/no credit.

Application for Student Teaching
Students should apply for student teaching during the academic year before they plan to student teach. Contact the Office of Teacher Education Services and Clinical Practice for additional information.

Official notification of the student teaching assignment will be emailed to the student. In addition, students can view their placement status in Tk-20 at any time. Final eligibility is determined after final grades are posted just prior to student teaching.

General Considerations

Students must be free of outside commitments that might interfere with full-time student teaching obligations. Students should not be regularly employed, nor should they carry heavy loads of extracurricular activities. Enrollment for course overload during the semester is permitted only with approval of the Director of the Office of Teacher Education Services and Clinical Practice.

Student teaching requirements also include a set number of days in seminars conducted by the university supervisor at the beginning and end of the semester.

Students are intentionally placed at a reasonable commuting distance with a preapproved mentor teacher within our Clinical Practice Network. Final determination of the student's assignment will rest with the Office of Teacher Education Services and Clinical practice. The placement process requires close partnership with our Professional Development Schools, Partner Schools, and affiliate schools.

All candidates pursuing licensure as teachers are required to spend 16 weeks in full-time student teaching. They must register for 12 credits in student teaching.

The only exception is a candidate who is double majoring in Elementary Education and Early Childhood Education. All candidates pursuing these double majors are required to spend 18 credits/24 weeks in student teaching across two semesters. They must register for 12 credits in one semester (fall or spring = 16 weeks) and then 6 credits in another semester (fall, spring, or summer = 8 weeks).

EDUCATIONAL LEADERSHIP

F. English, Chairperson
bsu.edu/edleadership

Programs in educational leadership, which are offered only at the graduate level, are designed to prepare students for positions as school superintendents, principals, business managers, directors of buildings and grounds, personnel directors, information officers, and adult and community education directors. Other programs prepare people for positions in junior colleges, other collegiate institutions, and other public and private sector organizations.

EDUCATIONAL PSYCHOLOGY

J. Cassady, Chairperson
bsu.edu/edpsych

Educational psychology includes the study of human development, learning, motivation, measurement, research, and statistics. Courses in the department are used in many areas, and in particular support teacher education programs and the minor in human development. Instructional topics involve human relationships, human development and learning, assessment in school contexts, and the teaching-learning process.

MINOR IN GIFTED AND TALENTED EDUCATION
### 15 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 420</td>
<td>Introduction to the Gifted and Talented Student</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 421</td>
<td>Identification and Evaluation of Gifted and Talented Students</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 425</td>
<td>Models and Strategies for Gifted Learners</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 496</td>
<td>Practicum in Gifted Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 411</td>
<td>Development of Creative Thinking or</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 423</td>
<td>Investigating the Social and Emotional Needs of Gifted Students</td>
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Subtotal: 15

### MINOR IN PSYCHOLOGY OF HUMAN DEVELOPMENT

**18 CREDITS**

12 credits from

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tbody>
<tr>
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<td>Psychology of Early Childhood</td>
<td>3</td>
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<tr>
<td>EDPS 270</td>
<td>Human Development Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 350</td>
<td>Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 351</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 355</td>
<td>Adult Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 360</td>
<td>Service Learning with Children, Families, and Adults</td>
<td>3</td>
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<tr>
<td>EDPS 370</td>
<td>Immersive Learning with Children, Families, and Adults</td>
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Subtotal: 12

6 credits from

<table>
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<tr>
<td>ANTH 311</td>
<td>Ethnicity and Race</td>
<td>3</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Genetics</td>
<td>4</td>
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<tr>
<td>BIO 453</td>
<td>Human Genetics and the Problems of Humanity</td>
<td>3</td>
</tr>
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<td>CPSY 230</td>
<td>Human Relationship Development</td>
<td>3</td>
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<tr>
<td>CPSY 360</td>
<td>Interrelational Aspects of Sexuality</td>
<td>3</td>
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<tr>
<td>EDPS 250</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 306</td>
<td>Behavior Analysis in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 345</td>
<td>Educational Tests and Measurement</td>
<td>3</td>
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<tr>
<td>ECYF 202</td>
<td>Child and Family Wellness</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 250</td>
<td>Family Relations</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 316</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 317</td>
<td>Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 318</td>
<td>Psychopathology</td>
<td>3</td>
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<tr>
<td>PSYS 321</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 324</td>
<td>Psychology of Women</td>
<td>3</td>
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<tr>
<td>PSYS 326</td>
<td>Psychology of Diversity</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 362</td>
<td>Motivation and Emotion</td>
<td>3</td>
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<tr>
<td>PSYS 468</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
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<tr>
<td>SOC 221</td>
<td>Introduction to Race and Ethnic Relations</td>
<td>3</td>
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<tr>
<td>SOC 224</td>
<td>Family and Society</td>
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<tr>
<td>SOC 235</td>
<td>Sociology of Gender</td>
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<td>SOC 421</td>
<td>Racial and Cultural Minorities in the United States</td>
<td>3</td>
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<tr>
<td>SOC 424</td>
<td>Family</td>
<td>3</td>
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<tr>
<td>SOC 431</td>
<td>Aging and the Life Course</td>
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<tr>
<td>SOC 434</td>
<td>Sociology of Human Sexuality</td>
<td>3</td>
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<tr>
<td>SPAA 270</td>
<td>Language Development</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 201</td>
<td>Introduction to Students With Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 302</td>
<td>Teaching Students with Disabilities in the General Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 334</td>
<td>Topics in Autism</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 18

### LICENSE IN GIFTED AND TALENTED EDUCATION

**12 CREDITS**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 420</td>
<td>Introduction to the Gifted and Talented Student</td>
<td>3</td>
</tr>
</tbody>
</table>
EDPS 421  Identification and Evaluation of Gifted and Talented Students  3
EDPS 425  Models and Strategies for Gifted Learners  3
EDPS 411  Development of Creative Thinking  3
or
EDPS 423  Investigating the Social and Emotional Needs of Gifted Students  3

Subtotal: 12

EDUCATIONAL STUDIES

R. Seymour, Interim Chairperson
bsu.edu/edstudies

The Department of Educational Studies offers professional education preparation in secondary, junior high/middle school, and all-grade teacher education. There are also minors in educational technology, leadership studies, and multicultural education (non-teaching minor). The department houses a license addition in computer education. A program is offered in personnel services in residence halls (residence assistance). Courses are offered in the social, philosophical, and historical foundations of education and in curriculum development.

ALL-GRADE EDUCATION PROGRAMS

PROFESSIONAL EDUCATION SEQUENCE

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDOF 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDJH 385</td>
<td>Principles of Teaching in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>EDMU 205</td>
<td>Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 250</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 390</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 150</td>
<td>Basic Concepts of Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 380</td>
<td>Principles of Teaching in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>From teaching methods courses</td>
<td>5-6</td>
</tr>
<tr>
<td></td>
<td>Student teaching</td>
<td>12</td>
</tr>
</tbody>
</table>

Departmental equivalents may substitute for EDJH 385; EDSE 150, EDSE 380. See departmental listing for equivalencies.

Teaching major

See the appropriate department for course requirements.

- English/language arts
- Family and consumer sciences
- Foreign language (French, German, Japanese, Latin, Spanish)
- Journalism
- Mathematics
- Science (chemistry, earth/space science, life science, physical science, physics)
- Social studies (areas: economics, geography, government, historical perspectives, psychology, sociology)
- Technical Teacher Education - admissions suspended
- Theatre

TEACHING MAJORS IN SCIENCE

See the College of Sciences and Humanities (p. 160).

TEACHING MAJOR IN SOCIAL STUDIES

99 credits
See the College of Sciences and Humanities (p. 162).

### MINOR IN DESIGN TECHNOLOGY

**18 CREDITS**

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>TEDU 102</td>
<td>Design Techniques</td>
<td>3</td>
</tr>
<tr>
<td>TDPT 210</td>
<td>Engineering Principles</td>
<td>3</td>
</tr>
<tr>
<td>TDPT 280</td>
<td>3-D Prototyping</td>
<td>3</td>
</tr>
<tr>
<td>TDPT 495</td>
<td>Green Prototyping and Upcycling</td>
<td>3</td>
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**Digital documentation, 6 credits from**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CM 106</td>
<td>CAD for Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>GCM 184</td>
<td>Graphics: Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>GCM 286</td>
<td>Graphics: Fundamentals of Photography</td>
<td>3</td>
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</table>

**Subtotal: 6**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FASH 101</td>
<td>Dimensions of Clothing</td>
<td>3</td>
</tr>
<tr>
<td>FASH 270</td>
<td>The Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 104</td>
<td>Housing Decisions</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

Any content-area course that significantly addresses technology integration may be used for electives.

### MINOR IN FAMILY AND CONSUMER SCIENCES

**18 CREDITS**

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOSP 110</td>
<td>Principles of Food Preparation and Food Science</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 240</td>
<td>Nutrition for Educators</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 275</td>
<td>Personal Nutrition</td>
<td>3</td>
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<tr>
<td>NUTR 340</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
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</table>

**Subtotal: 3**

### MINOR IN EDUCATIONAL TECHNOLOGY

**15 CREDITS**

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTE 355</td>
<td>Learning and Teaching with Emerging Technologies</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 120</td>
<td>Introduction to Computing and Digital Media for Teachers</td>
<td>1</td>
</tr>
<tr>
<td>EDTE 350</td>
<td>Curricular Integration of Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 352</td>
<td>Multimedia Web Design and Development for Education</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 360</td>
<td>Studies in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 365</td>
<td>Visual and Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 470</td>
<td>Technology Policy and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 480</td>
<td>Internship in Educational Technology</td>
<td>2 TO 4</td>
</tr>
<tr>
<td>EDTE 485</td>
<td>School Information Infrastructures and Technology Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MATH 331</td>
<td>Technology for Teaching, Learning, and Assessment in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 331</td>
<td>Technology in Education</td>
<td>1 TO</td>
</tr>
</tbody>
</table>

**Subtotal: 18**

### MINOR IN INDUSTRIAL LEADERSHIP

**18 CREDITS**

Requirements List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 300</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 361</td>
<td>Foundations of Human Resource Management and Employee Relations</td>
<td>3</td>
</tr>
<tr>
<td>TDPT 161</td>
<td>Introduction to Manufacturing Industries</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 18**
TDPT 360  Industrial Safety and Health  3
TDPT 390  Training and Development in Industry
Approved technical elective  3

Subtotal: 18

MINOR IN LEADERSHIP STUDIES

18 CREDITS

Core courses
EDHI 302  Student Leaders in Community Service  1 TO 3
EDHI 402  Global Leadership: Senior Capstone Experience  1 TO 3

Core electives, 3-6 credits from
EDHI 102  Introduction to Students as Leaders  1
EDHI 200  Introduction to Personnel Services in Residence Halls  1 TO 3
EDHI 202  Students as Group Leaders  1
EDHI 401  Special Topics in Leadership  1 TO 3

Subtotal: 3-6

Electives, 6-9 credits from
COMM 240  Introduction to Interpersonal Communication  3
COMM 330  Small Group Communication  3
COMM 340  Leadership Communication  3
EDMU 205  Introduction to Multicultural Education  3
EDMU 206  Advanced Study of Ethnic and Multicultural Group Behavior  3
EDMU 301  Instructional Strategies in Multicultured Schools  3
EDMU 302  Self and the Social Construction of Identity  3
EDMU 370  Representation and Multiculturalism: Theory and Practice  3
EDMU 400  Topical Seminar in Multicultural Studies: Culture of Masculinities  3
MGT 271  Introductory Organizational Behavior  3
MIL 101  Introduction to Military Science  1
MIL 102  Introduction to Leadership  1
PHIL 102  Introduction to Techniques of Critical Reasoning  3
PHIL 202  Ethics  3
POLS 130  American National Government  3
POLS 411  American Political Thought  3
POLS 474  Women and Politics  3
SOC 242  Social Problems  3
SOC 320  Social Inequality  3
SOC 441  Social Change  3

Subtotal: 6

MINOR IN MULTICULTURAL EDUCATION

15 CREDITS

Required Courses
EDMU 205  Introduction to Multicultural Education  3
EDMU 206  Advanced Study of Ethnic and Multicultural Group Behavior  3
EDMU 301  Instructional Strategies in Multicultured Schools  3

6 credits from
EDMU 302  Self and the Social Construction of Identity  3
EDMU 370  Representation and Multiculturalism: Theory and Practice  3
EDMU 400  Topical Seminar in Multicultural Studies: Culture of Masculinities  3

Subtotal: 6

Majors in communication studies, philosophy, political science, or sociology must take electives other than those used in the major.

Preparation of Teachers for Multicultural Secondary Schools (MULTICUL)

The MULTICUL program offers students an opportunity to study possible solutions to the problem of developing racial and cultural harmony. The program is designed to deal with as many ethnic groups as possible. Multiculturalism is a basic characteristic of our society as well as of our schools; therefore, potential teachers should prepare themselves to meet realistic situations. Three of the experiences that the MULTICUL program uses in the preparation of potential teachers are:

• specialized or elective courses offered in many major departments;
• courses designed especially for MULTICUL students by the Department of Educational Studies; and
• laboratory experiences in multicultural communities, social and professional organizations, and schools.

MINOR IN MULTICULTURAL EDUCATION

15 CREDITS

Required Courses
EDMU 205  Introduction to Multicultural Education  3
EDMU 206  Advanced Study of Ethnic and Multicultural Group Behavior  3
EDMU 301  Instructional Strategies in Multicultured Schools  3

6 credits from
EDMU 302  Self and the Social Construction of Identity  3
EDMU 370  Representation and Multiculturalism: Theory and Practice  3
EDMU 400  Topical Seminar in Multicultural Studies: Culture of Masculinities  3

Subtotal: 6

Other electives may be used with approval.
TEACHING MAJOR IN FAMILY AND CONSUMER SCIENCES (BA/BS)
There is a college moratorium on admission to this degree.

TEACHING MAJOR IN TECHNICAL TEACHER EDUCATION (BS)
There is a college moratorium on admission to this degree.

LICENSE IN COMPUTER EDUCATION TEACHING (UNDERGRADUATE, NON-STAND-ALONE LICENSE)

**15 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDTE 350</td>
<td>Curricular Integration of Technology</td>
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</tr>
<tr>
<td>EDTE 470</td>
<td>Technology Policy and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>6 credits from</td>
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<tr>
<td>EDTE 352</td>
<td>Multimedia Web Design and Development for Education</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 355</td>
<td>Learning and Teaching with Emerging Technologies</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 360</td>
<td>Studies in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 365</td>
<td>Visual and Digital Literacies</td>
<td>3</td>
</tr>
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</table>

Subtotal: 6

Any content-area course that significantly addresses technology integration may be used for electives.

3 credits from

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDTE 480</td>
<td>Internship in Educational Technology</td>
<td>2 TO 4</td>
</tr>
<tr>
<td>EDTE 485</td>
<td>School Information Infrastructures and Technology Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Subtotal: 15

**ELEMENTARY EDUCATION**

K. Fletcher, *Interim Chairperson*
bsu.edu/elementaryeducation

The Department of Elementary Education prepares students to teach children in early childhood programs and in kindergarten through sixth grades. Students will be guided by the outline of baccalaureate degrees (p. 20), the teacher education curriculum, and the concentration areas listed below. Students will also be guided by the professional education assessment/decision points for teacher education programs.

TEACHING MAJOR IN ELEMENTARY EDUCATION (GRADES K-6) (BA/BS)

**102 CREDITS**

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 100</td>
<td>Introduction to Art</td>
<td>3</td>
</tr>
<tr>
<td>BIO 102</td>
<td>Biological Concepts for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 100</td>
<td>Education in a Democratic Society</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 200</td>
<td>Planning for the Elementary and Early Childhood Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 244</td>
<td>Early and Elementary Education for Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 300</td>
<td>Management, Organization, and Instruction in the Elementary Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 350</td>
<td>Teaching in the Elementary Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDEL 463</td>
<td>Student Teaching: Elementary</td>
<td>6</td>
</tr>
<tr>
<td>EDEL 465</td>
<td>Student Teaching: Elementary</td>
<td>6</td>
</tr>
<tr>
<td>EDFO 420</td>
<td>Social, Historical, and Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 260</td>
<td>Human Growth and Development for Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 393</td>
<td>Educational Psychology for Elementary Education</td>
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</tr>
<tr>
<td>EDRD 204</td>
<td>Literature for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 300</td>
<td>Reading and Language Instruction in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 350</td>
<td>Advanced Reading and Language Arts Instruction in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 430</td>
<td>Assessment and Intervention in Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological Environment</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
</tr>
<tr>
<td>HSC 350</td>
<td>Elementary School Health Program</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Data Analysis, Geometry, and Measurement for the Elementary</td>
<td>3</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 260</td>
<td>Human Growth and Development for Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 393</td>
<td>Educational Psychology for Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 204</td>
<td>Literature for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 300</td>
<td>Reading and Language Instruction in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 350</td>
<td>Advanced Reading and Language Arts Instruction in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDRD 430</td>
<td>Assessment and Intervention in Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological Environment</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>American History, 1492-1876</td>
<td>3</td>
</tr>
<tr>
<td>HSC 350</td>
<td>Elementary School Health Program</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Number, Operations, and Algebraic Reasoning for the Elementary Teacher</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Data Analysis, Geometry, and Measurement for the Elementary</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MATH 391</td>
<td>Teaching and Learning Mathematics in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 265</td>
<td>Basic Music for Classroom Teachers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 101</td>
<td>Physical Science Concepts for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>SCI 397</td>
<td>Teaching Science in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 302</td>
<td>Teaching Students with Disabilities in the General Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SS 397</td>
<td>Teaching Social Studies in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Concentration area</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

**Subtotal: 102**

These major courses, AHS 100, BIO 102, GEOG 101 or GEOL 101, HIST 201, MATH 201, MUSE 265, PHYC 101, also fill a University Core Curriculum requirement.

**English as a Second Language, 12 credits**
Prepares teachers to work with non-native speakers of English in listening, writing, reading, and speaking skills. These courses can be applied toward licensure in Teaching English as a Second Language as well.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 334</td>
<td>English Linguistics for Educators</td>
<td>3</td>
</tr>
<tr>
<td>ENG 436</td>
<td>Theory and Research in Teaching English to Speakers of Other Languages</td>
<td>3</td>
</tr>
<tr>
<td>ENG 437</td>
<td>Methods and Materials in Teaching English to Speakers of Other Languages</td>
<td>3</td>
</tr>
<tr>
<td>ENG 457</td>
<td>Practicum in Teaching English to Speakers of Other Languages</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

The above requirements are for the English as a Second Language concentration area available for Teaching Majors in Elementary Education (Grades K-6) only.

**Gifted and Talented, 12 credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 420</td>
<td>Introduction to the Gifted and Talented Student</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 421</td>
<td>Identification and Evaluation of Gifted and Talented Students</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 425</td>
<td>Models and Strategies for Gifted Learners</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 411</td>
<td>Development of Creative Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Mathematics, 12 credits**
Designed to provide a mathematics background in the content standards characterizing the K-12 mathematics curriculum. These courses can be applied toward requirements for licensure in middle school mathematics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 310</td>
<td>Topics in Algebra for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MATH 316</td>
<td>Topics in Number Theory for the Elementary and Middle School Teacher</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Language Arts, 12 credits**
Exploration in depth of the theory and content of the study of literature, writing, and language. Courses selected for this concentration are particularly related to content, issues, and concerns of the elementary classroom.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEL 302</td>
<td>Developing Elementary English Language Arts with Multicultural Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following writing courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 213</td>
<td>Introduction to Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 285</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following literature courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDRD 318</td>
<td>Literature for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205</td>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 206</td>
<td>Reading Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 414</td>
<td>Young Adult Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following language courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 220</td>
<td>Language and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENG 320</td>
<td>Introduction to Linguistic Science</td>
<td>3</td>
</tr>
<tr>
<td>ENG 321</td>
<td>English Linguistics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 24**

These courses can be applied toward requirements for licensure in middle school mathematics.
### Modern Languages, 12 credits

**Modern Languages: Classical culture concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC 301</td>
<td>Classical Literature in English Translation</td>
<td>3 TO 6</td>
</tr>
<tr>
<td>CC 305</td>
<td>Classical Myth and Theory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6 credits from CC, GRK, and LAT courses</td>
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</tbody>
</table>

**Subtotal: 12**

**Modern Languages: French concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 202</td>
<td>Intermediate French 2</td>
<td>3</td>
</tr>
<tr>
<td>FR 301</td>
<td>Conversation</td>
<td>3</td>
</tr>
<tr>
<td>FR 302</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 credits from any other 300-400-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>level FR course</td>
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**Subtotal: 12**

**Modern Languages: German concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 202</td>
<td>Intermediate German 2</td>
<td>3</td>
</tr>
<tr>
<td>GER 301</td>
<td>Conversation</td>
<td>3</td>
</tr>
<tr>
<td>GER 302</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 credits from any other 300-400-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>level GER course</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Modern Languages: Japanese concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPA 202</td>
<td>Intermediate Japanese 2</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 301</td>
<td>Advanced Japanese 1</td>
<td>4</td>
</tr>
<tr>
<td>JAPA 302</td>
<td>Advanced Japanese 2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3 credits from any other 300-400-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>level SP course</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Modern Languages: Spanish concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP 202</td>
<td>Intermediate Spanish 2</td>
<td>3</td>
</tr>
<tr>
<td>SP 301</td>
<td>Conversation and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SP 302</td>
<td>Composition and Grammar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 credits from any other 300-400-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>level SP course</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: 12**

### Psychology and Counseling, 12 credits

Elementary teachers must understand the psychology of children; their thinking, feelings, behavior, development, learning, the measurement of these characteristics, and the environments in which they occur. These psychological issues are essential for understanding, interacting with, and instructing children.

12 credits from

**Counseling psychology and guidance services**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSY 400</td>
<td>Fundamentals of Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 420</td>
<td>Techniques of Psychological Interventions</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 470</td>
<td>Introduction to Cross-Cultural Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Educational psychology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 306</td>
<td>Behavior Analysis in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 345</td>
<td>Educational Tests and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 350</td>
<td>Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDPS 351</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Psychological science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYS 313</td>
<td>The Psychology of Human Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 316</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 317</td>
<td>Personality</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

Students electing PSYS courses must take PSYS 100 for University Core Curriculum to satisfy prerequisites.
### Subtotal: 12

**Science, 12 credits**
Includes a broad range of courses that cover life, earth, and physical sciences. Students seeking this concentration learn to use scientific knowledge, skills, and habits of mind to solve problems and think critically about the natural world. If GEOL 101 was selected for the University Core Curriculum requirement, then GEOL 201 must be selected for the concentration.

Choose a minimum of 12 credits from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 101</td>
<td>Astronomy Materials for the Teacher</td>
<td>3</td>
</tr>
<tr>
<td>or ASTR 120</td>
<td>The Sun and Stars</td>
<td>3</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>People and Chemistry or General, Organic, and Biochemistry for the Health Sciences</td>
<td>3, 5</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General, Organic, and Biochemistry for the Health Sciences</td>
<td>3, 5</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Planet Earth's Geological Environment or Earth, Life, and Time</td>
<td>3, 3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

### Subtotal: 12

**Technology, 12 credits**
This concentration area provides the opportunity for students to acquire specialized professional knowledge beyond the minimum technological benchmarks expected of all future teachers.

“Technology is human innovation in action” (Technology for All. n.d., p.16). This action facilitates the generation of knowledge that leads to the development of solutions that assist and extend our capabilities as people.

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTE 350</td>
<td>Curricular Integration of Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 470</td>
<td>Technology Policy and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>TDPT 100</td>
<td>Technology and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 3 credits from the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110</td>
<td>Introduction to Computer Science and Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>EDCU 331</td>
<td>Public School Curriculum</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDRD 445</td>
<td>Using Computers in Reading Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 352</td>
<td>Multimedia Web Design and Development for Education</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 355</td>
<td>Learning and Teaching with Emerging Technologies</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 360</td>
<td>Studies in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 365</td>
<td>Visual and Digital Literacies</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 480</td>
<td>Internship in Educational Technology 2 TO Technology</td>
<td>4</td>
</tr>
<tr>
<td>TDPT 400</td>
<td>Capstone in Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Wellness, 12 credits**
Wellness: Nutrition and family concentration
Designed to provide an integrated approach to understanding relationships among wellness, nutrition, and the family environment. The teacher is prepared to identify children at risk and apply problem-solving skills using appropriate community health resources.

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECYF 250</td>
<td>Family Relations</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 240</td>
<td>Nutrition for Educators</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 6 credits from the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECYF 202</td>
<td>Child and Family Wellness</td>
<td>3</td>
</tr>
<tr>
<td>ECYF 380</td>
<td>Parenting</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 110</td>
<td>Principles of Food Preparation and Food Science</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 395</td>
<td>Food and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

NUTR 240 substitutes for NUTR 340 for prerequisite purposes.

**Wellness: Physical education concentration**
Provides both content knowledge and practical experiences in designing and implementing a developmentally appropriate physical education program on the elementary school level.

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 363</td>
<td>Current Issues in Administration and Coordination of Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PEP 227</td>
<td>Introduction to Adapted Physical Education/Activity</td>
<td>3</td>
</tr>
<tr>
<td>PEP 252</td>
<td>Teaching Physical Fitness and Fitness Activities</td>
<td>3</td>
</tr>
<tr>
<td>PEP 291</td>
<td>Motor Development and Learning Across the Lifespan</td>
<td>3</td>
</tr>
</tbody>
</table>
SPECIAL EDUCATION
A. Davis, Interim Chairperson
bsu.edu/spced
The Department of Special Education prepares teachers to work with students with exceptional needs including students who are deaf and hard of hearing, require mild interventions, or severe interventions. The department also has a teaching major in early childhood special education, and, in conjunction with the Department of Elementary Education, a dual-major in mild interventions and elementary education, and early childhood and early childhood special education. Minors are available in applied behavior analysis, autism, deaf and hard of hearing, early childhood special education, and ASL. ASL courses satisfy the Modern Language requirement.

MAJOR IN APPLIED BEHAVIOR ANALYSIS WITH AN EMPHASIS IN AUTISM (BA/BS)

36 CREDITS

Requirements List

EDPS 270 Human Development Across the Lifespan 3
SPCE 200 Exceptional Children and Adults 3
SPCE 280 Behavior Analysis: Principles, Procedures, and Philosophy 3
SPCE 290 Introduction to Autism Spectrum Disorders 3
SPCE 292 Treatment and Interventions for Autism Spectrum Disorders 3
SPCE 307 Ethical and Professional Practice in Behavior Analysis 3
SPCE 310 Application and Consultation in Applied Behavior Analysis 3
SPCE 315 Advanced Behavior Analysis 3
SPCE 316 Single Subject Research Design and Applications 3

Subtotal: 36

This program is not open to students with a Minor in Applied Behavior Analysis, Minor in Autism Spectrum Disorders, or Certificate in Behavioral Studies.

MINOR IN AMERICAN SIGN LANGUAGE

15 CREDITS
Requirements List

SNLN 251 American Sign Language 1 3
SNLN 252 American Sign Language 2 3
SNLN 253 American Sign Language 3 3
SNLN 254 American Sign Language 4 3
SNLN 300 Structure of American Sign Language 3

Subtotal: 15

MINOR IN APPLIED BEHAVIOR ANALYSIS

15 CREDITS

Required Courses

SPCE 280 Behavior Analysis: Principles, Procedures, and Philosophy 3
SPCE 307 Ethical and Professional Practice in Behavior Analysis 3
SPCE 310 Application and Consultation in Applied Behavior Analysis 3
SPCE 315 Advanced Behavior Analysis 3
SPCE 316 Single Subject Research Design and Applications 3

Subtotal: 15

This program is offered on-line only. Not open to students with a Major in Applied Behavior Analysis or Certificate in Behavioral Studies.

MINOR IN AUTISM SPECTRUM DISORDERS

15 CREDITS

Required Courses

EDPS 270 Human Development Across the Lifespan 3
SPCE 200 Exceptional Children and Adults 3
SPCE 290 Introduction to Autism Spectrum Disorders 3
SPCE 292 Treatment and Interventions for Autism Spectrum Disorders 3
SPCE 320 Advanced Interventions for Autism Spectrum Disorders 3

Subtotal: 15

This program is offered on-line only. Not open to students with a Minor in Applied Behavior Analysis.

MINOR IN EXCEPTIONAL NEEDS: EARLY CHILDHOOD SPECIAL EDUCATION
### 18 CREDITS

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCE 200</td>
<td>Exceptional Children and Adults</td>
<td>3</td>
</tr>
<tr>
<td>or SPCE 201</td>
<td>Introduction to Students With Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 302</td>
<td>Teaching Students with Disabilities in the General Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 210</td>
<td>Theory and Practices in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 215</td>
<td>Assessment of Young Children With Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 311</td>
<td>Developmental Methods for Infants and Toddlers with Exceptional Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 312</td>
<td>Developmental Methods for Preschool Children with Exceptional Needs</td>
<td>3</td>
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<td>SPCE 417</td>
<td>Practicum: Infants/Toddlers and Preschoolers with Special Needs</td>
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Admission to the Teacher Education Curriculum is waived for this program.

Subtotal: 18

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### MINOR IN DEAF STUDIES

**18 CREDITS**

**Required Courses**

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<th>Course</th>
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<td>Introduction to Sign Systems, Educational Environments, and Services</td>
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<td>American Sign Language 4</td>
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<td>Speech Development and Technology for Deaf and Hard of Hearing Individuals</td>
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<td>Deaf People and Civil Rights</td>
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Directed Elective (select 1)

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Subtotal: 22

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### TEACHING MAJOR IN EXCEPTIONAL NEEDS: EARLY CHILDHOOD SPECIAL EDUCATION (BA/BS)

**100 CREDITS**

**Required Courses**

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<td>Biological Concepts for Teachers</td>
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<td>GEOG 101</td>
<td>Earth, Sea, and Sky: A Geographic View</td>
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<td>or GEOL 101</td>
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<td>American History, 1492-1876</td>
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**Required Courses**

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<td>EDPS 345</td>
<td>Educational Tests and Measurement</td>
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<td>Language Development</td>
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### SPCE 277  Human Relations, Collaboration, and Diversity  3

**Subtotal: 30**

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<td>Assessment in Special Education, Including Response to Intervention</td>
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**Subtotal: 30**

### Early Childhood Special Education, 18 credits

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<td>Developmental Methods for Infants and Toddlers with Exceptional Needs</td>
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**Subtotal: 18**

### DEAF EDUCATION (BA/BS)

**100 CREDITS**

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**Subtotal: 22**

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**Subtotal: 18**

### Mild Interventions (Early and Middle Childhood), 30 credits

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<td>SPCE 331</td>
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<td>SPCE 489</td>
<td>Student Teaching: Mild Disabilities</td>
<td>1 TO</td>
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**Subtotal: 30**

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See Professional Education Assessment/Decision Points (p. 234) for additional information.

### TEACHING MAJOR IN EXCEPTIONAL NEEDS: DEAF EDUCATION (BA/BS)

**100 CREDITS**

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Subtotal: 100

See Professional Education Assessment/Decision Points (p. 234) for additional information.

**TEACHING MAJOR IN EXCEPTIONAL NEEDS: MILD INTERVENTIONS (ALL-GRADE) (BA/BS)**

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Subtotal: 22

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Mild Interventions (Early and Middle Childhood), 30 credits

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<td>SPCE 331</td>
<td>Technology in Education</td>
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<td>SPCE 361</td>
<td>Advanced Practicum in Special Education</td>
<td>1 TO</td>
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<td>Teaching Methods in Mild Interventions K-12</td>
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Subtotal: 30

Mild Interventions (Adolescent and Young Adult), 18 credits

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Subtotal: 30
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**Subtotal: 22**

### Mild Interventions (Early and Middle Childhood), 30 credits

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**Subtotal: 30**

### Intense interventions (All-Grade), 24 credits

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<td>Introduction to Persons with Physical Disabilities and Other Health Care Needs</td>
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<td>Educating Children and Youth with Severe Disabilities</td>
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</table>

**Subtotal: 24**

### NON-STAND ALONE LICENSE IN EXCEPTIONAL NEEDS, MILD INTERVENTIONS FOR MIDDLE AND SECONDARY CONTENT AREAS (NON-STAND ALONE LICENSE)

### 21 CREDITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDRD 320</td>
<td>Disciplinary Literacy in the</td>
<td>3</td>
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Elementary Schools

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDTE 350</td>
<td>Curricular Integration of Technology</td>
<td>3</td>
</tr>
<tr>
<td>SPCE 302</td>
<td>Teaching Students with Disabilities in the General Education Classroom</td>
<td>3</td>
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<tr>
<td>SPCE 361</td>
<td>Advanced Practicum in Special Education</td>
<td>1 TO 6</td>
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<tr>
<td>SPCE 371</td>
<td>Introduction to Mild Interventions</td>
<td>3</td>
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<td>SPCE 475</td>
<td>Teaching Methods in Mild Interventions for Adolescents</td>
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<td>SPCE 476</td>
<td>Transition Planning for Adolescents with Exceptionalities</td>
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</tbody>
</table>

Subtotal: 21

**CERTIFICATE IN BEHAVIORAL STUDIES**

12 credits

*(See certificates (p. 22).)*
### Courses

#### ACC - ACCOUNTING

**ACC 200 - Accounting for New Ventures (3)**
A survey course focusing on basic accounting and forecasting for non-accountants. Students will be introduced to financial statements and learn how to develop budgets and projections to support the launch of new ventures.
Prerequisite: ECON 116 or ECON 201; ENT 241. Open only to non-business students.

**ACC 201 - Principles of Accounting 1 (3)**
An introduction to accounting emphasizing the basic principles underlying the accounting cycle. Includes the preparation of reports to management and external users of financial statements. Core Transfer Library:
Professional/Occupational (IPO 1801)
Prerequisite: completed 18 credits.

**ACC 202 - Principles of Accounting 2 (3)**
A continuation of ACC 201 emphasizing financial statement analysis and managerial and cost accounting concepts. Core Transfer Library:
Professional/Occupational (IPO 1802)
Prerequisite: ACC 201 with a grade higher than C-.

**ACC 299X - Experimental/Developmental Topics (1 TO 6)**
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

**ACC 301 - Intermediate Accounting 1 (3)**
The theoretical framework for accounting principles and procedures, the application of generally accepted accounting principles, and the preparation of financial statements.
Prerequisite: ACC 201 and 202 with grades higher than C-.

**ACC 302 - Intermediate Accounting 2 (3)**
A continuation of ACC 301. Includes such topics as accounting for income taxes, pensions and post-retirement benefits, leases and other external reporting concerns.
Prerequisite: ACC 301 with grade higher than C-.

**ACC 305 - Accounting Information Systems (3)**
A study of the role of accounting information systems and related subsystems. The relationship of accounting information systems to other systems, including management information systems, is addressed.

**ACC 306 - Intermediate Management Accounting (3)**
Measurement and management tools and techniques, emphasizing managerial uses of financial and operational data.
Prerequisite: admission to the Miller College of Business; ACC 202.

**ACC 369 - Internship in Accounting (1 TO 6)**
Under a program approved and supervised by the Department of Accounting, a student majoring in accounting will work as an accounting intern for a public accountant, a business firm, or a governmental agency.
Prerequisite: admitted into the major, successfully completed ACC 301; permission from the accounting internship coordinator.
A total of 6 credits may be earned.

**ACC 410 - Advanced Topics in Taxation (3)**
A study of federal taxes on the business income of corporations, partnerships, exempt entities, and estates and trusts. Includes the use of tax reference materials and tax services.
Prerequisite: ACC 401 with a grade higher than C-.
Parallel: ACC 302.

**ACC 420 - Selected Topics in Accounting (3)**
Explores topics of current interest to the accounting profession.
Prerequisite: ACC 302.
Open only to accounting majors.

**ACC 430 - Government and Nonprofit Accounting (3)**
Underlying concepts and standards of financial reporting for government and nonprofit entities are introduced. Emphasizes financial reporting differences between these entities and business enterprises.
Prerequisite: ACC 301.

**ACC 440 - Advanced Financial Accounting (3)**
Special accounting problems related to business combinations, consolidated financial statements, fiduciary accounting, international accounting, and partnership accounting.
Prerequisite: ACC 302 with a grade higher than C-.
ACC 451 - Auditing Principles and Practices (3)
Auditing of financial data and related controls from the perspective of internal and external auditors. Topics include internal control procedures, auditing procedures and standards, as well as reporting.
Prerequisite: ACC 302 with a grade higher than C-.

ACC 495 - Special Topics in Accounting (1 TO 3)
Special advanced topics in accounting offered periodically with varying topics.
Prerequisite: junior and senior accounting majors or by permission of the department chairperson.
A total of 6 credits may be earned with different topics, but no more than 3 in any one semester or term.

ACC 497 - Independent Study in Accounting (1 TO 3)
An opportunity for students with superior scholastic records to study some phase of accounting. The topic selected, methods of study, and credits must be approved by the department.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

ACR - ART: CRAFTS

ACR 211 - Ceramics: Introduction (3)
Basic hand-building techniques: pinch, slab, and coiling methods. Decorating, glazing, and firing will be part of the studio experience.
Prerequisite: ADS 101 or 102 or CAP 102.
Open only to School of Art majors and minors.

ACR 221 - Metals: Introduction (3)
Introduction to jewelry and object making using metal. Emphasis on design and the introductory techniques of sawing, soldering, forming, and setting.
Prerequisite: ADS 101 or 102 or CAP 102.
Open only to School of Art majors and minors.

ACR 224 - Metals: Introduction to Enameling (3)
Introduces the process of fusing glass to metal. Students will be exposed to the medium as an alternative mark-making/painting process as well as a vehicle for object making and jewelry fabrication. Historical as well as contemporary examples will be studied in order to create a contextual basis for the work explored in the course. The discussion of such works will help to develop skills in critical thinking.
Prerequisite: ADS 101 and 102 and 103 and AFA 101.
Open only to School of Art majors and minors.

ACR 231 - Glass: Introduction (3)
Introduction to studio glass, history and practice. Emphasis on beginning techniques of blown glass, fused glass, and cold working processes.
Prerequisite: ADS 101 or 102 or CAP 102.
Open only to School of Art majors and minors.

ACR 233 - Glass: Introduction to Kiln Sculpting (3)
Introduction to glass work constructed and manipulated in the kiln. Studio practices will include fusing and slumping, sand casting, relief, and lost wax.
Prerequisite: ADS 101 or 102 or CAP 102.
Open only to School of Art majors and minors.

ACR 291 - Ceramics for Non-Majors (3)
Introductory ceramics course for non-art majors. Students learn a range of ceramic production techniques with hand building and wheel throwing projects, sketchbooks, art critiques and collaborative activities in an art studio atmosphere.
This course may be repeated.
A total of 9 credits may be earned.
Open only to non-art majors.

ACR 292 - Metals for Non-Majors (3)
Introductory art-making course for non-art majors interested in basic jewelry and making art with non-ferrous metals. Students learn a range of basic techniques for making wearable and functional decorative objects through studio projects, sketchbooks, art critiques and collaborative activities in an art studio atmosphere.
This course may be repeated.
A total of 9 credits may be earned.
Open only to non-art majors.

ACR 293 - Glass for Non-Majors (3)
Introductory glass art-making course for non-art majors. Students learn a range of glass production techniques such as glass blowing and kiln-forming through projects, sketchbooks, art critiques and collaborative activities in an art studio atmosphere.
This course may be repeated.
A total of 9 credits may be earned.
Open only to non-art majors.

ACR 299X - Experimental Topics in Three-Dimensional Art (3)
Topics relevant to the discipline. Course titles to be announced before each semester.
A total of 6 credits may be earned.
Open only to School of Art majors and minors.
ACR 300 - Craft Workshop (1 TO 3)
A hands-on workshop experience to focus on the development of specialized skills and techniques that apply to the studio areas of ceramics or metals. Specific content will be announced before each offering. A particular topic can only be taken once.
Prerequisite: to be announced before each offering. A total of 3 credits may be earned.
Open only to School of Art majors and minors.

ACR 312 - Ceramics: Throwing 1 (3)
Beginning throwing; use of the potter's wheel to develop skills in throwing. A continued study of form, glaze, and idea.
Prerequisite: ACR 211.
Open only to School of Art majors and minors.

ACR 313 - Ceramics: Hand Building 1 (3)
Continued study of hand building methods as well as form, idea, and glazing techniques.
Prerequisite: ACR 211.

ACR 314 - Ceramics: Throwing 2 (3)
Use of the potter's wheel to develop production form; continued study of form, glaze, and idea.
Prerequisite: ACR 312.

ACR 315 - Ceramics: Hand Building 2 (3)
Continued study of hand building techniques to develop an integration of form, glaze, and idea. Individual problems will be set up according to student needs.
Prerequisite: ACR 313.

ACR 316 - Ceramics: Glaze and Kiln Technology (3)
Introduction to clays, ceramic chemicals, glaze calculation and kiln construction, technology, and firing processes.
Prerequisite: ACR 211 or permission of the instructor.
Open only to School of Art majors and minors.

ACR 322 - Metals: Metalsmithing and Die Forming (3)
Introduction to metalsmithing techniques, including raising for vessels and chasing and repoussé. Basic hammering and forming techniques will be covered.
Prerequisite: ACR 221.
Open only to School of Art majors and minors.

ACR 323 - Metals: Casting (3)
Jewelry casting using the lost-wax investment technique. Production casting will be covered, including rubber-mold making and wax injecting for cast multiples.
Prerequisite: ACR 221.
Open only to School of Art majors and minors.

ACR 325 - Metals: Fabrication Techniques (3)
Soldering construction techniques including chains, catches, hinges, and stone settings.
Prerequisite: ACR 221.
Open only to art majors.

ACR 331 - Glass: Special Topics (3)
Investigation of a specific topic in glass (neon, pate de verre, torchworking, complex casting, electroplating). Topic to be announced.
Prerequisite: ACR 231 or 233.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

ACR 332 - Glass: Blowing (3)
Intermediate techniques of blown glass and cold glass fabrication, and introduction to studio equipment maintenance.
Prerequisite: ACR 231.
Open only to School of Art majors and minors.

ACR 333 - Glass: Casting (3)
Intermediate glass casting and kiln forming.
Prerequisite: ACR 233.
Open only to art majors.
Open only to School of Art majors and minors.

ACR 334 - Glass: Cold Working (3)
Advanced cold working techniques. Focuses on glass surface manipulation, cutting, polishing, and laminating.
Prerequisite: ACR 231 or 233.
Open only to School of Art majors and minors.

ACR 335 - Glass: Advanced Studio (3)
Advanced investigation of glass with an emphasis on individual style augmented by research and defining a personal studio practice.
Prerequisite: ACR 332, 333, or 334.
Open only to School of Art majors and minors.

ACR 369 - Craft Internship (1 TO 3)
Five to ten weeks of supervised summer work-related experience within or outside the university community.
Prerequisite: portfolio review by area faculty, junior standing; permission of the director of the school.
A total of 3 credits may be earned.
Open only to art majors.

**ACR 415 - Independent Study in Crafts (1 TO 3)**
Designed for professionally oriented students allowing them to select and explore more intensively a special area. Prerequisite: sponsorship by an art faculty member; permission of director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ACR 416 - Ceramics: Throwing 3 (3)**
An in-depth exploration of forming vertically and horizontally on the wheel; continued study of form, glaze, and idea. Prerequisite: ACR 314.

**ACR 417 - Ceramics: Hand Building 3 (3)**
Continued study of hand building techniques, form, and idea based on individual student needs. Prerequisite: ACR 315.

**ACR 418 - Ceramics: Senior Project (3)**
Synthesis and culmination of studio experiences in the major content area, with a student exhibition as the concluding effort. In addition, there must be documentation through slides, resume, and artist statement. Prerequisite: ACR 416, 417; permission of the ceramics faculty and the director of the school. Open only to art majors.

**ACR 419 - Glass: Advanced Problems (3)**
Advanced investigation of glass with an emphasis on individual style augmented by research and defining a personal studio practice. Prerequisite: ACR 332, 333, or 334. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to art majors.

**ACR 426 - Metals: New Technologies (3)**
New technologies in metalsmithing, which can include electroforming, laser cutting, and 3D printing. Prerequisite: ACR 221. Open only to School of Art majors and minors.

**ACR 427 - Metals: Advanced Studio Problems (3)**
Advanced investigation of metal with an emphasis on research and defining a personal studio practice. Prerequisite: ACR 322 and 323 and 324. Open only to School of Art majors and minors.

**ACR 428 - Metals: Senior Project (3)**
Synthesis of experience in metals culminating in an exhibition of work. In addition, there must be documentation through slide portfolio and resume. Should be taken during the final semester of undergraduate work. Prerequisite: ACR 427; permission of the metals faculty and the director of the school. Open only to art majors.

**ACR 427 - Professional Practices for the 3D Artist (3)**
Focuses on portfolio preparation, job opportunities, residencies, galleries, contracts, and commissions. Prerequisite: ACR 211 or 221 or 231 or 233 or AFA 221. Open only to School of Art majors and minors.

**ACR 428 - Glass: Senior Project (3)**
Synthesis and culmination of studio experiences in glass culminating in an exhibition of work. Documentation of work, resume, and artist statement. Prerequisite: ACR 426, 24 credits in glass; sponsorship by the glass faculty; permission of the director of the school. Open only to art majors.

**ACR 498 - Seminar in Crafts (3 TO 9)**
Group or individual investigation and experience in various concepts, media, and techniques as related to the crafts. Prerequisite: completion of 30 credits of art courses and permission of the director of the school. A total of 9 credits may be earned.

**ADS - ART: DESIGN**

**ADS 101 - 2D Foundations Studio (3)**
Exploration of basic art principles, elements, and concepts emphasizing spatial organization of the two-dimensional plane. Also employs basic media, techniques, and tools emphasizing craftsmanship. Open only to School of Art majors and minors.

**ADS 102 - 3D Foundations Studio (3)**
Introduction to the fundamental concepts of organizing form in three-dimensional space. Emphasis on the concepts of material manipulation and process as a form of thinking. Utilizes a variety of common 3D media and basic processes aimed at developing creativity in 3D problem solving. Serves as an introduction to the wood shop. Open only to School of Art majors and minors.
ADS 103 - 4D Foundations Studio (3)
Introduction to technical, formal and conceptual use of four-dimensional art practices including time and space, sound, moving images, performance and interactive projects. Emphasis placed on development of ideas by exploring strategies for artistic thinking, creative process and problem solving, and interdisciplinary collaboration. Open only to School of Art majors and minors.

ADS 200 - Design: Computer for Visual Communication/Graphic Design (3)
Introduction to software programs and workflow to complete design work. A technical foundation course to prepare incoming Visual Communications/Graphic Design students for producing design work. This course is for students intending to be Visual Communications/Graphic Design students. Completion of this course is a requirement of the Visual Communications/Graphic Design portfolio review. Open only to intended Visual Communications/Graphic Design majors.

ADS 241 - Design: Introduction to Typography and Tools (3)
Introduction and orientation to concepts and skills necessary for visual communication in two and three dimensions. Fundamentals of structure, color, typography, and tools are emphasized. Prerequisite: ADS 101 or CAP 101; ADS 102 or CAP 102; AFA 101 or CAP 162; AFA 202. Open only to art majors. Offered only fall semester.

ADS 242 - Design: Introduction to Design Systems and Practices (3)
Consideration of typography in relation to visual organization; color theory and its application to communication. Type and image are covered in experimental and practical formats. Prerequisite: ADS 241; admission to the graphic design sequence through portfolio review. Open only to visual communication majors.

ADS 299X - Experimental Topics in Design (3)
Topics relevant to the discipline. Course titles to be announced before each semester. A total of 6 credits may be earned.

ADS 300 - Design Workshop (1 TO 3)
A hands-on workshop experience to focus on the development of specialized skills and techniques that apply to the area of design. Specific content will be announced before each offering. A particular topic can only be taken once. Prerequisite: to be announced before each offering. A total of 3 credits may be earned. Open only to art majors.

ADS 301 - Web Design: Coding for Designers (3)
Exploration of technology that could include beginning Web design, multimedia, motion graphics, and other relevant topics to the design discipline. Prerequisite: to be announced before each offering. Open only to visual communication majors.

ADS 302 - Web Design: Frameworks, Libraries and Interactivity (3)
Exploration of technology that could include intermediate and advanced Web design, multimedia, motion graphics, and other relevant topics to the design discipline. Prerequisite: to be announced before each offering. Open only to visual communication majors.

ADS 341 - Design: Advanced Practices 1 (3)
Exploration of creative thematic development through all stages of the design process. Technical elements of type specification, computer implementation, and graphic communication production. Prerequisite: ADS 242. Open only to visual communication majors.

ADS 342 - Design: Advanced Practices 2 (3)
Concentrated problem analysis emphasizing symbology, typography, and image development. Continued integration of computers in the design process. Prerequisite: ADS 341. Open only to visual communication majors.

ADS 415 - Design: Independent Study (1 TO 3)
Designed for professionally oriented students, allowing them to select and more intensively explore a special area. Prerequisite: sponsorship by an art faculty member; permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

ADS 441 - Design: Research and Professional Practices (3)
Advanced problem solving in sequential and three-dimensional forms. Prerequisite: ADS 342. Open only to visual communication majors.
**ADS 442 - Design: Senior Project and Portfolio (3)**
Advanced problem solving in visual communication. Refinement of presentation techniques and resume and portfolio development.
Prerequisite: ADS 441.
Open only to visual communication majors.

**ADS 443 - Design: Special Topics (3 TO 9)**
Intensive exploration of strategies and visual development within specific design areas. Could include computer, letterpress, exhibition and signage, packaging, typography, publications, illustration, or development of concept and content.
Prerequisite: ADS 341 or permission of the instructor.
A total of 9 credits may be earned.
Open only to art majors.

**ADS 471 - Design: Practicum (3)**
Problem solving within and/or outside of the university community. Group and/or individual projects for clients. Requires portfolio review and permission of the instructor.
Prerequisite: ADS 341.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to art majors.

**ADS 480 - Design: Senior Thesis (3)**
Intensive study with research and resolution of a current problem in visual communication as a capstone experience.
Prerequisite: ADS 342, sponsorship by an art faculty member; permission of the director of the school.
Open only to visual communication majors.

**ADS 498 - Seminar in Design (3 TO 9)**
Group or individual investigation and experiences in the fine arts beyond the scope of regular course work.
Prerequisite: completion of 30 credits in art or permission of the director of the school.
A total of 9 credits may be earned.

**AED - ART: EDUCATION**

**AED 201 - Art Education: Introduction (3)**
Introduction to art education as a teaching profession. Emphasizes investigating artistic growth of normal and special populations and the materials, techniques, tools, art concepts, and strategies appropriate for teaching art to such students.
Prerequisite: ADS 101 and ADS 102 and ADS 103; AFA 101 or by permission of the instructor.
Open only to School of Art majors.

**AED 303 - Art Education: Visual Education Methods (3)**
A teaching methods class for education majors and other majors using visual images for instructional purposes. Includes content, sequencing, and assessment.
Prerequisite: ADS 102 or CAP 102; AFA 202; AHS 102 for art majors; ENG 104 or 114 for other majors.
Open only to art majors or by permission of the instructor.

**AED 304 - Art Education: Curriculum and Instruction (3)**
Curriculum content, planning, teaching strategies, assessment in art education by developing a thematically based unit of art education lessons.
Prerequisite: AHS 101 and AHS 102; C or better grade in AED 201 or by permission of the instructor; admission to the Teachers College.
Open only to School of Art majors.

**AED 305 - Art Education: Elementary Teaching Practicum (3)**
Curriculum content, planning, teaching strategies, assessment in art education by developing a thematically based unit of art education lessons.
Prerequisite: AHS 101 and AHS 102; C or better grade in AED 201; admission to the Teachers College.
Parallel: EDJH 385 or EDSE 380.
Open only to art majors.

**AED 399 - Art Education: Secondary Methods and Materials (3)**
A study of methods, materials, curricula, and issues relating to high school and middle school level visual arts education.
Prerequisite: C or better grade in AED 305 or special permission.
Parallel: EDJH 385 or EDSE 380.
Open only to art majors.

**AED 415 - Art Education: Independent Study (1 TO 3)**
Permits professionally oriented art students to select and more intensively explore an area of art education.
Prerequisite: sponsorship of an art faculty member; permission of the director of the school.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to students with areas in art.

**AED 498 - Seminar in Art Education (1 TO 9)**
Topical seminar with emphasis on critical thinking and discourse as practices of the professional artist and art educator, including both group and individual investigation and experiences.
Prerequisite: ADS 102 or CAP 102; AFA 202; AHS 102.
A total of 9 credits may be earned.
Open only to art majors.

**AFA - ART: FINE ARTS**

**AFA 202 - Drawing: The Figure (3)**
Life drawing and intensive study of the human figure. Descriptive, expressive, and interpretive methods of imagining the figure are explored, and a variety of materials and techniques are introduced.
Prerequisite: AFA 101.
Open only to School of Art majors and minors or by instructor permission.

**AFA 211 - Painting: Introduction (3)**
Introduction to painting. Study of basic considerations of image making with oil paint. Focuses on media, techniques, design elements, and concepts.
Prerequisite: ADS 101 or 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors or by instructor permission.

**AFA 217 - Painting: Watercolor (3)**
Introduction to materials and techniques of transparent watercolor as they apply to the solution of painting problems.
Prerequisite: ADS 101 or 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors or by instructor permission.

**AFA 221 - Sculpture: Introduction (3)**
Introduction to traditional and contemporary sculpture. The materials associated with additive, subtractive, and substitution techniques will be demonstrated.
Prerequisite: ADS 101 or 102 or CAP 102.
Open only to School of Art majors and minors.

**AFA 231 - Printmaking: Introduction (3)**
Beginning printmaking techniques with an emphasis on intaglio and relief processes.
Prerequisite: ADS 101 or 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors or by instructor permission.

**AFA 291 - Drawing for Non-Majors (3)**
Introductory drawing course for non-art majors. Students learn a range of basic drawing media and techniques through projects, sketchbooks, and critique in collaborative activities in an art studio atmosphere. This course may be repeated.
A total of 9 credits may be earned.
Open only to non-art majors.

**AFA 292 - Watercolor for Non-Majors (3)**
Introductory painting course for non-art majors. Students learn a range of basic watercolor painting techniques and media through projects, sketchbooks, and critique in collaborative activities in an art studio atmosphere. This course may be repeated.
A total of 9 credits may be earned.
Open only to non-art majors.

**AFA 293 - Printmaking for Non-Majors (3)**
Introductory fine art printmaking class for non-art majors. Students learn a range of basic fine art printmaking techniques such as relief, intaglio, serigraphy, lithography, and/or letterpress through projects, sketchbooks, and critique in collaborative activities in an art studio atmosphere. This course may be repeated.
Open only to non-art majors.

**AFA 294 - Sculpture for Non-Majors (3)**
Introductory sculpture class for non-art majors. Students learn a range of basic fine art sculpture techniques and forms such as modeling, carving, assemblage and casting through projects, maquettes, sketchbooks, and critique in collaborative activities in an art studio atmosphere. This course may be repeated.
Open only to non-art majors.

**AFA 299X - 2D Experimental Topics in Art (3)**
Topics relevant to the discipline. Course titles to be announced before each semester.
A total of 6 credits may be earned.
Open only to School of Art majors and minors.

**AFA 300 - Studio Workshop (1 TO 3)**
A hands-on workshop experience to focus on the development of specialized skills and techniques that apply to the studio areas of fine art. Specific content will be announced before each offering. A particular topic can only be taken once.
Prerequisite: to be announced before each offering.
A total of 3 credits may be earned.
Open only to School of Art majors and minors.
AFA 301 - Drawing: Point of View (3)
Introduces a variety of compositional formats and strategies based in observational practice. Examines historical and contemporary conceptions of space and considers point of view as both a physical and conceptual construct. Explores representational, abstract, and non-objective modes of drawing.
Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors.

AFA 302 - Drawing: Narrative and Metaphor (3)
Focuses on drawings that use narrative and metaphor as points of departure. Emphasis on invention, use of visual and non-visual source material, and synthesis of refined drawing skills. Explores representational, abstract, and non-objective modes of drawing.
Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors.

AFA 303 - Drawing: Intermediate Figure (3)
Explores a variety of concepts and materials as they relate to the complexities and dynamics of the human form. Expands upon the ability to observe and communicate through descriptive, expressive and interpretive methods. Focuses on both historical and contemporary figure drawing.
Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors.

AFA 304 - Drawing: Experimental Figure (3)
Explores the human figure as a catalyst for subject matter using a broad range of materials, surfaces, and processes. Focuses on drawing the human figure from observation and imagination. Includes process oriented and expressive styles.
Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors.

AFA 305 - Drawing: From Nature (3)
Drawing explored through visual responses to the environment and natural subject matter. Includes field trips and site specific sketching and journaling.
Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to School of Art majors and minors.

AFA 312 - Painting: The Figure (3)
Exploration of descriptive, expressive, and interpretive methods of painting the figure using a variety of contemporary and historical techniques and approaches.
Prerequisite: AFA 211.

AFA 313 - Painting: Concepts and Contexts (3)
Includes studio exercises, readings, and critiques. Explores painting problems in relation to conceptual and theoretical issues in the history of painting.
Prerequisite: AFA 211.
Open only to School of Art majors and minors.

AFA 314 - Painting: Materials and Strategies (3)
Introduces mixing paint from raw materials, emphasizing acrylic mediums. Exploration of technical, formal, and pictorial problems with emphasis on individual solutions.
Prerequisite: AFA 211.
Open only to School of Art majors and minors.

AFA 315 - Painting: Narrative (3)
Explores narrative strategies in painting using contemporary and historical approaches. Focus on representational to expressive methods of figurative story-based painting.
Prerequisite: AFA 211.
Open only to School of Art majors and minors.

AFA 316 - Painting: Special Topics (3)
Investigation of a particular topic, problem, or issue in painting. Topic to be announced.
Prerequisite: AFA 211, 217.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

AFA 317 - Painting: Encaustics (3)
Studio exercises, problems, and critiques in relation to the ancient medium of encaustic (hot wax) painting. Develop technical skills with an emphasis on contemporary individual creative solutions.
Prerequisite: AFA 211.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

AFA 322 - Sculpture: Additive and Subtractive Processes (3)
Continued exploration of materials used in formal sculpture; welded and forged metal, wood construction and carving, stone carving, clay, wax, and plastic.
Prerequisite: AFA 221.
Open only to School of Art majors and minors.
AFA 323 - Sculpture: Introduction to Casting (3)
Introduction to and emphasis on the basic techniques and concepts of mold making and casting aluminum, bronze, and plastics.
Prerequisite: AFA 221.

AFA 324 - Sculpture: Wood (3)
Introduction to wood fabrication, shaping, and finishing as it applies to functional and non-functional objects.
Prerequisite: AFA 221.

AFA 325 - Sculpture: Casting and Mold Making (3)
Continuation of AFA 323. Advanced casting and mold-making procedures. Individual development of the concepts and techniques associated with the casting process.
Prerequisite: AFA 323.

AFA 341 - Printmaking: Intaglio 1 (3)
Intermediate-level printmaking dealing with basic intaglio techniques. Emphasizes ability to deal creatively and conceptually with the technical process.
Prerequisite: AFA 231.
Open only to School of Art majors and minors.

AFA 342 - Printmaking: Intaglio 2 (3)
Advanced printmaking dealing with basic intaglio techniques including line etching, drypoint, engraving, softground, and aquatint. Open-ended problem solving and in-depth study emphasizing the ability to deal creatively and conceptually with the technical process.
Prerequisite: AFA 341.

AFA 351 - Printmaking: Lithography 1 (3)
Fundamental processes of drawing and printing lithographs using stones and aluminum plates. Drawing and painting techniques are used to develop images.
Prerequisite: AFA 231.
Open only to School of Art majors and minors.

AFA 352 - Printmaking: Lithography 2 (3)
Further development and investigation of the processes of lithography, including color. Exploration of stone and metal plate techniques.
Prerequisite: AFA 351.

AFA 361 - Printmaking: Relief 1 (3)
Fundamental procedures of relief printing from the woodblock and other surfaces emphasizing the use of color and new approaches. Developed images are expected to have a relationship to this print medium.
Prerequisite: AFA 231.
Open only to School of Art majors and minors.

AFA 362 - Printmaking: Relief 2 (3)
Continuation of procedures of relief printing from the woodblock and other surfaces emphasizing the use of color and new approaches. Develop images that have a relationship to this print medium.
Prerequisite: AFA 361.
Open only to School of Art majors and minors.

AFA 371 - Printmaking: Serigraphy 1 (3)
Introductory printmaking dealing with the processes of serigraphy, including the basic stencil techniques and their variations, photo silk-screen processes, and the use of color. Emphasizes the ability to deal creatively with the silk-screen process; silk-screen as a fine art form.
Prerequisite: AFA 231.
Open only to School of Art majors and minors.

AFA 372 - Printmaking: Serigraphy 2 (3)
Continued exploration of printmaking in serigraphy designed to increase sophistication in serigraphic techniques, approaches, concepts, and use of color.
Prerequisite: AFA 371.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

AFA 381 - Bookmaking (3)
Creative investigation of book structures (folded, glued, sewn) with an emphasis on integration of sequential imagery and type. A variety of media and approaches are presented including photo-etching and letterpress. Personal creativity is emphasized.
Prerequisite: AFA 231.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

AFA 405 - Drawing: Advanced Topics (3)
Advanced investigation of drawing with an emphasis on individual exploration and conceptual development. Focuses on diverse approaches to drawing, thematic development, and research.
Prerequisite: 9 credits from AFA 301 or 302 or 303 or 304.
Open only to School of Art majors.
AFA 406 - Drawing: Independent Directions (3)
Self-directed studio production and research in drawing. Development of a series of drawings that explore a personal direction.
Prerequisite: AFA 405.
Open only to art majors.

AFA 415 - Independent Study in Fine Arts (1 TO 3)
Designed for professionally oriented students, allowing them to select and explore more intensively a special topic.
Prerequisite: sponsorship by an art faculty member and permission of the director of the school.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

AFA 416 - Painting: Advanced Studio Practice (3)
Individualized advanced-level problems in painting, continuing the emphasis on personal conceptual goals.
Prerequisite: 18 credits in painting.
Open only to art majors.

AFA 417 - Painting: Independent Directions (3)
Self-directed studio production and research in painting. Development of a series of paintings that explore a personal direction.
Prerequisite: 18 credits in painting.
Open only to art majors.

AFA 426 - Sculpture: Advanced Problems (3)
Designed to extend technical understanding and aesthetic development beyond the fundamental level.
Prerequisite: AFA 322 or 323 or 324. A total of 9 credits may be earned, but no more than 3 in any one semester or term.
Open only to art majors.

AFA 443 - Printmaking: Intaglio 3 (3)
Advanced printmaking emphasizing aesthetic decision making involving the intaglio process through the knowledge of technique and use of personal artistic choices.
Prerequisite: AFA 342.
Open only to art majors.

AFA 453 - Printmaking: Lithography 3 (3)
Investigation of additional drawing and painting techniques as they relate to lithography. Further development of printing skills and the lithographic image.
Prerequisite: AFA 352.

AFAM - AFRICAN AMERICAN STDS
AFAM 100 - Introduction to African-American Studies (3)
Examines the important historical, political, cultural, social, economic, and artistic issues concerning people of African descent in the United States from the beginning of
the Trans-Atlantic Slave Trade to contemporary developments such as the emergence of the Black Lives Matter movement.

**AFAM 200 - African-American Studies Theory and Research Methods (3)**

Provides an introduction to critical theories of race and racialization. Includes an investigation of blackness as a category of critical analysis, and will be attentive to the way in which blackness is shaped by gender, class, sexuality, and nationality. Finally, the course will introduce students to research methods used to examine these theories.

**AFAM 400 - African-American Studies Capstone (3)**

Provides students with an individual assignment under supervision of an African-American affiliated faculty member. Students will work individually with the affiliated faculty member to develop an individual research project focusing on African Americans, Africans, and/or people of the African Diaspora. Course topics will vary based on the research specialization of the faculty member and research interest of the student, but emphasis will be placed on the formulating and completing of original, field-specific research.

Prerequisite: AFAM 100 and 200.

**AFR - AFRICAN STUDIES**

**AFR 499 - African Studies Senior Thesis (3)**

The formulation or writing of a research-oriented thesis/project working with a faculty advisor. Students will produce a research paper or project on an African theme or topic of their choice.

Prerequisite: permission of the department chairperson.

**AHS - ART: HISTORY**

**AHS 100 - Introduction to Art (3)**

Through a survey of art and artifacts from ancient through modern times and the historical and social elements that helped to shape them, course offers an introduction to understanding and appreciating painting, sculpture, and architecture. Core Transfer Library: Fine Arts (IFA 1310)

Open only to students not majoring in art.

**AHS 101 - Introduction to Art History: Global Traditions (3)**

Provides an introduction to the art and architecture of the premodern world and the methods used by art historians. Major traditions in Europe, Asia, Africa, and the Americas are examined in terms of media, technique, style, subject matter, and sociocultural context.

Open only to School of Art majors and minors.

**AHS 102 - Introduction to Art History: The Modern and Contemporary World (3)**

Provides an introduction to the history of art and architecture from Renaissance Europe to the present, including the rise of modernism in the nineteenth and twentieth centuries and key issues related to the global contemporary art world of the late twentieth and twenty-first centuries.

Open only to School of Art majors and minors.

**AHS 200 - Critical Perspectives on Contemporary Art (3)**

Basic art criticism applied to the critical analysis and investigation of contemporary art examples from western and non-western cultures and a range of artistic media. Course activities include lecture, group discussion, team presentations, and attendance of art events outside of class.

Open only to non-art majors.

**AHS 201 - Art Criticism and Meaning (3)**

Employs lecture, discussion groups, and critical writing to explore aesthetics and content in art, in response to texts in art history, theory, and criticism, case studies in art history, and developments in contemporary art.

Prerequisite: AHS 100 or 101 or 102.

Open only to School of Art majors and minors.

**AHS 220 - Art in the United States (3)**

Survey of the development of painting, sculpture, decorative arts, and architecture in the United States from the colonial period to the mid-twentieth century within the context of the country's history, including social and cultural interests.

Prerequisite: AHS 100 or 102 or permission of the instructor.

Open to all students.

**AHS 230 - Ancient Art (3)**

Examines the art and architecture of the ancient world, focusing on Greece and Rome, and with special emphasis on art in its cultural (i.e. social, religious, and political) context.

Prerequisite: AHS 100 or 101 or 102.

**AHS 241 - Gothic Art (3)**

Art and architecture in Europe from the twelfth-century beginnings of the French Gothic to the early fifteenth-century Flemish school. Emphasis on stylistic and technical innovations in the context of shifting ideals, patronage, and artistic production.
Prerequisite: AHS 100 or 101 or permission of the instructor.
Open to all students.

**AHS 251 - Italian Renaissance Art (3)**
An introduction to art and architecture produced in Italy from around 1300 to the midsixteenth century. Studying some of the western art history’s best known artists, such as Giotto, Donatello, Botticelli, Leonardo, Michelangelo, Raphael, and Titian, we will explore the ways in which art and architecture were commissioned, made, and functioned in Renaissance Italy.
Prerequisite: AHS 100 or 102.
Open to all students.

**AHS 252 - Baroque and Rococo Art (3)**
Visual arts of western Europe from the 1590's through the 1750's as High Renaissance precedents were creatively transformed in response to such imperatives as the Counter-Reformation, absolute monarchy and rebellion, colonial empires, and free-market capital.
Prerequisite: AHS 100 or 102 or permission of the instructor.
Open to all students.

**AHS 253 - Neoclassicism and Romanticism (3)**
Visual arts of western Europe from 1750 to 1850, the time of the Enlightenment, the French Revolution, and Napoleonic empire, and the rise of England to global supremacy. Emphasis on the struggle in art between opposing poles of rationalism, historical precedent, and individualism.
Prerequisite: AHS 100 or 102 or permission of the instructor.
Open to all students.

**AHS 255 - Impressionism and Post-Impressionism (3)**
Exploration of the individual careers of artists associated with Impressionism and Post-Impressionism, including Monet, Renoir, Morisot, Degas, van Gogh, Gauguin, and others, within the context of contemporaneous society, scientific studies, and cultural transformations.
Prerequisite: AHS 100 or 102 or permission of the instructor.
Open to all students.

**AHS 261 - Modern Art (3)**
Investigation of the stylistic, theoretical, and social dimensions of modernism and its foundations, with an emphasis on art of the 19th and early 20th centuries.
Prerequisite: AHS 100 or 102.

**AHS 263 - Contemporary Art (3)**
Exploration of ideas, issues, and personalities involved with the production, reception, marketing, interpretation, and criticism of established and new media around the world in the generation of living artists.
Prerequisite: AHS 100 or 102.
Open to all students.

**AHS 264 - Film Analysis (3)**
Emphasizes understanding cinematic works through the analysis of styles and techniques employed by filmmakers. The historical evolution of these styles and techniques will be addressed, as well as social, cultural, and political influences.
Open to all students.

**AHS 265 - Feminist Art History (3)**
Investigation into the contributions women have made to the visual arts as artists, patrons and muses from ancient to contemporary times, emphasizing the feminist perspective.
Prerequisite: AHS 100 or 102.
Open to all students.

**AHS 275 - History of Photography (3)**
Survey of technical, aesthetic, theoretical, and social issues in photography throughout its history from the early nineteenth century to the digital age.
Prerequisite: AHS 100 or 102.
Open to all students.

**AHS 281 - Mexican Art (3)**
Survey of the art of Mexico from approximately the year 1000 through the modern period, with an emphasis on the work of the major Mexican artists of the nineteenth and twentieth centuries in its social and political contexts.
Prerequisite: AHS 100 or 101 or 102.

**AHS 285 - African Art (3)**
A survey of the art and architecture of Africa from prehistory to the present.
Prerequisite: AHS 100 or 101 or 102.

**AHS 290 - Asian Art (3)**
General survey of art and architecture in south, southeast, central, and east Asia from the prehistoric era to the advent of the industrial era. Emphasizes characteristic forms,
techniques, and art theory in the context of developments in society and religion.
Prerequisite: AHS 100 or 101 or permission of the instructor.

AHS 295 - Islamic Art (3)
A survey of the art and architecture of the Islamic world from the 7th century to the present.
Prerequisite: AHS 100 or 101 or permission of the instructor.

AHS 301 - Special Topics in History of Art (3)
Investigation of a particular topic, theme, or issue in art history. Exact content will be announced before each offering. A particular topic can only be taken once.
Prerequisite: AHS 100 or 101, or permission of the instructor.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

AHS 302 - Special Topics in Art History: Asian, African, Islamic, or Latin American (3)
Investigation of a particular topic, theme, or issue in Asian, African, Islamic, and/or Latin American art history. A particular topic can only be taken once.
Prerequisite: AHS 100 or 101 or 102.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

AHS 303 - Special Topics in Art History: Ancient to Early Modern Europe (3)
Investigation of a particular topic, theme or issue in Ancient to Early Modern European art history. A particular topic can only be taken once.
Prerequisite: AHS 100 or 101 or 102.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

AHS 304 - Special Topics in History of Art: American, Modern, and Contemporary (3)
Investigation of a particular topic, theme, or issue in American, modern, or contemporary art history. Exact content will be announced before each offering. A particular topic can only be taken once.
Prerequisite: AHS 100 or 102, or permission of the instructor.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

AHS 310 - History of Visual Communication (3)
Detailed analysis of visual communication from the late nineteenth century to the present, with emphasis on European and American design. Influential movements, artists, designers, and technology that shape current design thinking will be highlighted.
Prerequisite: ADS 241 or permission of the instructor.
Open only to art majors.

AHS 311 - History of Three-Dimensional Design (3)
Interdisciplinary study of three-dimensional design and function as applied to furniture design, exhibition design, architecture, and decorative arts from the eighteenth century to the present with an emphasis on American and European design.
Prerequisite: AHS 102.
Open only to art majors and art history minors.

AHS 415 - Independent Study in Art History (1 TO 3)
In consultation with faculty sponsor, a student may select and intensively explore a special topic.
Prerequisite: sponsorship by an art faculty member; permission of the director of the school.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

AHS 450 - Art Museum Theory and Practice (3)
Exploration of the art museum as a social institution: its history, principles, and operations. Paradoxes of function, and possible resolutions. Issues of audience. Organization, skills, and careers. Readings, discussion, and on-site activities.
Prerequisite: AHS 100 or 102.

AHS 455 - Seminar in Art History (3)
A seminar on a theme or issue in art history. Topics will vary and students may take any given topic only once. Students will complete a research project related to the seminar’s topic.
Prerequisite: AHS 100 or 101 or 102 and at least 3 credits in AHS at the 200-level or above.
A total of 12 credits may be earned, but no more than 6 in any one semester or term.
Open only to students who have at least 9 credits of art history courses, or by permission of the instructor.

AHS 456 - Capstone Seminar in Art History (3)
A seminar on a theme or issue in art history. Topics will vary and students may take any given topic only once. Students will complete a research project related to the seminar’s topic as their capstone experience.
Prerequisite: AHS 100 or 101 or 102 and at least 15 credits in AHS at the 200-level or above and permission of the instructor.
A total of 12 credits may be earned, but no more than 6 in any one semester or term.
Open only to art history majors who have at least 18 credits of AHS courses and permission of the instructor.

**AHS 480 - Art History Senior Thesis (3)**
Synthesis and culmination of the undergraduate art history curriculum. Capstone experience will be an academic paper or curated exhibition (actual or virtual) which demonstrates the student's research, analytical, and writing abilities.
Prerequisite: AHS 101, 102; completion of 15 credits of art history; sponsorship by an art history faculty member; permission of the director of the school.
Open only to art history majors.

**AHSC - ALLIED HEALTH SCIENCE**

**AHSC 201 - Introduction to Medical Imaging and Patient Care (2)**
Introduction to the profession of medical imaging and patient care including basic concepts of the medical imaging profession, critical thinking and problem solving, introduction to the clinical environment, human diversity, patient care, and ethical and legal issues.
Prerequisite: admission to the professional concentration phase of the radiography program.
Parallel: AHSC 224 and 228 and 231.
Open only to radiography students.

**AHSC 224 - Radiographic Procedures 1 (3)**
A comprehensive study of radiographic procedures including anatomy, physiology, medical terminology, patient care and positioning, radiation safety, image production, and image critique.
Prerequisite: admission to the professional concentration phase of the radiography program.
Parallel: AHSC 201 and 228 and 231.
Open only to radiography students.

**AHSC 225 - Radiographic Procedures 2 (4)**
Continuation of AHSC 224, including a comprehensive study of radiographic procedures including anatomy, physiology, medical terminology, patient care and positioning, radiation safety, image production and image critique.
Prerequisite: AHSC 201 and 224 and 228 and 231.
Parallel: AHSC 229 and 232.
Open only to radiography students.

**AHSC 226 - Radiographic Procedures 3 (2)**
Continuation of AHSC 225, including a comprehensive study of radiographic procedures including anatomy, physiology, medical terminology, patient care and positioning, radiation safety, image production, image critique, and other imaging procedures and emerging technologies in the medical imaging and radiation therapy profession.
Prerequisite: AHSC 225 and 229 and 232.
Parallel: AHSC 227 and 230 and 233.
Open only to radiography students.

**AHSC 227 - Computed Tomography (1)**
A study of computed tomography utilized in medical imaging including patient care and safety, imaging procedures, physics and instrumentation and sectional anatomy.
Prerequisite: AHSC 225 and 229 and 232.
Parallel: AHSC 226 and 230 and 233.
Open only to radiography students.

**AHSC 228 - Radiographic Principles 1 (2)**
Introduction to radiographic principles including an overview of radiation physics, properties of radiation, biological effects, production and interaction, and radiation biology and protection.
Prerequisite: admission to the professional concentration phase of the radiography program.
Parallel: AHSC 201 and 224 and 231.
Open only to radiography students.

**AHSC 229 - Radiographic Principles 2 (3)**
Continuation of AHSC 228 including the study of radiographic image production, technical factors, photographic and geometric effects, and radiation protection.
Prerequisite: AHSC 201 and 224 and 228 and 231.
Parallel: AHSC 225 and 232.
Open only to radiography students.

**AHSC 230 - Radiographic Principles 3 (3)**
Continuation of AHSC 229 including image production, quality control, radiation protection, and radiographic pathology.
Prerequisite: AHSC 225 and 229 and 232.
Parallel: AHSC 226 and 227 and 233.
Open only to radiography students.

**AHSC 231 - Clinic 1 Radiography (1)**
Directed learning experiences in radiographic clinical procedures through a rotational system at affiliated clinical
education sites. Prerequisite: admission to the professional concentration phase of the radiography program.
Parallel: AHSC 201 and 224 and 228.
Open only to radiography students.

AHSC 232 - Clinic 2 Radiography (5)
Directed learning experiences in radiographic clinical procedures through a rotational system at affiliated clinical education sites.
Prerequisite: AHSC 201 and 224 and 228 and 231.
Parallel: AHSC 225 and 229.
Open only to radiography students.

AHSC 233 - Clinic 3 Radiography (6)
Directed learning experiences in radiographic clinical procedures through a rotational system at affiliated clinical education sites.
Prerequisite: AHSC 225 and 229 and 231.
Parallel: AHSC 226 and 227 and 230.
Open only to radiography students.

AHSC 234 - Clinic 4 Radiography (4)
Directed learning experiences in radiographic clinical procedures through a rotational system at affiliated clinical education sites.
Prerequisite: AHSC 226 and 227 and 230 and 233.
Open only to radiography students.

AHSC 298 - Special Studies in Medical Imaging (1 TO 3)
Designed to give current radiography students an opportunity to individually research a topic in the medical imaging and radiation therapy profession. May include experimental work and development of research techniques.
Prerequisite: admission to the professional concentration phase of the radiography program and permission of the radiography program director.
A total of 3 credits may be earned.
Open only to radiography students.

AHSC 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

AHSC 303 - Introduction to Human Diseases for Respiratory Therapists (2)
Gives respiratory therapy students a general introduction to a broad variety of human diseases. Etiology, diagnosis, and treatment will be discussed.
Open only to respiratory therapy students.

AHSC 311 - Cardiorespiratory Physiology (3)
Focuses on the normal anatomy and physiology of the cardiorespiratory system, including lung mechanics, ventilation, perfusion, diffusion, gas transport, and acid-base balance.
Open only to respiratory therapy students.

AHSC 315 - Cardiorespiratory Assessment and Patient Care (3)
Basic cardiorespiratory assessment, vital signs, laboratory studies, and charting. Includes required preclinical skills and practice.
Open only to respiratory therapy students.

AHSC 325 - General Respiratory Care (4)
Focuses on basic respiratory therapy procedures. Physiologic applications, effects on the cardiopulmonary system, and hazards for each therapeutic procedure are discussed. Topics include physical principles, airway care, humidity and aerosol therapy, medical gas therapy, hyperinflation therapy, and chest physical therapy.
Prerequisite: PHYC 110.
Parallel: AHSC 326.
Open only to respiratory therapy students.

AHSC 326 - Respiratory Care Techniques 1 (2)
Focuses on the most important clinical laboratory procedures and on procedures used by the respiratory therapist. Specifically, instructs in patient assessment, oxygen administration, humidity and aerosol therapy, chest physical therapy, hyperinflation therapy, and monitoring expired gases.
Parallel: AHSC 325.
Open only to respiratory therapy students.

AHSC 333 - Cardiorespiratory Pharmacology 1 (2)
Provides an overview of the basics of pharmacologic therapeutics, focusing on dosages and solutions and bronchodilator drugs. Indications, side effects, mechanism of action, and route of administration are discussed.
Prerequisite: BIO 113; CHEM 101.
Open only to respiratory therapy students.
AHSC 350 - Cardiorespiratory Diseases (3)
Outlines general cardiorespiratory diseases of the adult, including acute and chronic disorders. Respiratory therapeutics applied to these disorders are discussed.
Prerequisite: AHSC 311.
Open only to respiratory therapy students.

AHSC 355 - Life Support (3)
Includes artificial airways, monitoring, supportive therapy, principles of ventilatory care and maintenance, as well as physiologic effects and complications of airway pressure therapy.
Prerequisite: AHSC 325.
Parallel: AHSC 356.
Open only to respiratory therapy students.

AHSC 356 - Respiratory Care Techniques 2 (2)
Focuses on the most important clinical laboratory procedures and equipment used by the respiratory therapist to support critically ill patients. Specifically, instructs in mechanical ventilators, pressure and heart rate monitors, pulmonary mechanics devices, and arterial blood gas sampling.
Prerequisite: AHSC 325, 326.
Parallel: AHSC 355.
Open only to respiratory therapy students.

AHSC 371 - Pulmonary Diagnostics (3)
Outlines and discusses both normal and abnormal lung volumes and capacities, mechanics of ventilation, inspiratory and expiratory flows, and diffusion of the lung. Additionally, specialty diagnostic techniques such as x-rays, bronchoscopy, ventilation/perfusion scans, and exercise testing are overviewed.
Prerequisite: AHSC 355.
Open only to respiratory therapy students.

AHSC 385 - Respiratory Care Practicum 1 (3)
Applies cardiopulmonary assessment techniques, information gathering, and communications skills in providing general respiratory care in the clinical setting, including medical gas, humidity and aerosol therapy delivery, and treatment modalities.
Prerequisite: AHSC 325, 326.
Open only to respiratory therapy students.

AHSC 395 - Respiratory Care Practicum 2 (4)
Introduces variations in oxygen delivery and basic mechanical ventilation. Treatment modalities and hemodynamic monitoring on mechanically ventilated patients will be integrated.
Prerequisite: AHSC 385.
Open only to respiratory therapy students.

AHSC 405 - Neonatal - Pediatric Respiratory Care (3)
Outlines fetal physiology, cardiorespiratory transition, and respiratory management of neonatal pathologies, including respiratory distress syndrome. Cardiorespiratory techniques for the pediatric patient as well as pediatric trauma and transport are reviewed.
Prerequisite: AHSC 315, AHSC 325.
Open only to respiratory therapy students.

AHSC 420 - Introduction to Research in Respiratory Care (2)
Examines research in respiratory care and applies basic statistics and concepts of research design.
Prerequisite: AHSC 350.
Open only to respiratory therapy students.

AHSC 430 - Management and Leadership for Respiratory Care (3)
Specific theory and practice applied to directing and managing a respiratory therapy department, including the managerial functions of budgeting, controlling, organization, planning, staffing, and coordinating. Leadership and skills pertinent to these functions as well as effective communication and professionalism are included.
Prerequisite: AHSC 355.
Open only to respiratory therapy students.

AHSC 440 - Advanced Cardiac Life Support (2)
Introduces the didactic and technical skills needed for successful completion of the advanced cardiac life support proficiencies set forth by the American Heart Association.
Prerequisite: AHSC 395.
Open only to respiratory therapy students.

AHSC 444 - Cardiorespiratory Pharmacology 2 (2)
An overview of pharmacologic agents and their effects on the various body systems. Drug effects on the respiratory, circulatory, and nervous systems are emphasized.
Prerequisite: AHSC 333.
Open only to respiratory therapy students.

AHSC 445 - Seminar in Cardiorespiratory Care (3)
Specialty and expanded practice areas of emphasis for respiratory care presented in a seminar format. Emphasis will be placed on critical thinking, judgment skills, and communication abilities.
Prerequisite: AHSC 456.
Open only to respiratory therapy students.

AHSC 451 - Cardiorespiratory Monitoring and Special Techniques (3)
Reviews electrocardiograms, intracranial pressure monitoring, capnography, and pulmonary artery monitoring techniques. Case studies emphasizing these special procedures are presented.
Prerequisite: AHSC 385.
Open only to respiratory therapy students.

AHSC 456 - Respiratory Care Practicum 3 (6)
Allows students to provide advanced patient assessment techniques, information gathering skills, and communication and leadership skills in the neonatal/pediatric and adult critical care clinical settings. 
Prerequisite: AHSC 395.
Open only to respiratory therapy students.

AHSC 461 - Pulmonary Rehabilitation and Geriatrics (3)
Gives an overview of rehabilitation therapies and techniques applicable to chronic lung disease, as well as respiratory home care. Basic concepts of gerontology and geriatrics are presented.
Prerequisite: AHSC 385.
Open only to respiratory therapy students.

AHSC 480 - Patient Education Techniques for Respiratory Therapists (3)
Education techniques for patients and families dealing with chronic respiratory disease. Topics include asthma, COPD, and smoking cessation education. Assessment of learning readiness, reading levels, and patient comprehension will be addressed.
Prerequisite: AHSC 461.
Open only to respiratory therapy students.

AHSC 485 - Respiratory Care Practicum 4 (6)
Students will manage patients in critical care settings with emphasis on cardiopulmonary assessment and monitoring. Participation in pulmonary rehabilitation, homecare, advanced life support, pulmonary function, polysomnography, and other clinical specialties. 
Prerequisite: AHSC 456.
Open only to respiratory therapy students.

AMST - AMERICAN STUDIES

AMST 101 - Introduction to American Studies (3)
Survey of American studies as a field and as an interdisciplinary approach to the study of American civilization. Methods and theories of American studies will be discussed, along with major themes and topics in American life and thought.

AMST 450 - Reading and Independent Study (1 TO 3)
Topics for independent study and research to be chosen and investigated in consultation with an instructor who has expertise in the area involved.
Prerequisite: permission of the American studies director. 
A total of 3 credits may be earned.

AMST 499 - Selected Topics in American Studies (3 TO 9)
Survey and investigation of a specific topic, issue, or problem in American studies. Particular subject matter will be announced before each offering.
A total of 9 credits may be earned.

ANAT - ANATOMY

ANAT 201 - Fundamentals of Human Anatomy (3)
Basic study of human anatomy. Emphasizes gross and functional anatomy but also includes microscopic study of selected tissues and organs. Two lectures and one two-hour laboratory period weekly.

ANAT 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

ANAT 425 - Human Embryology and Histology (4)
Examines human development from germ cell formation to organ formation including microscopic structure of tissue and abnormal development.
Prerequisite: BIO 111, 112; or ANAT 201; or permission of the department chairperson.

ANAT 490 - Special Studies in Anatomy (1 TO 3)
Designed to give undergraduate anatomy students who exhibit special aptitude and interest an opportunity to pursue special lines of scientific investigation on an individual basis. Experimental work, wide reading, and development of research techniques or skills.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
**ANTH - ANTHROPOLOGY**

**ANTH 101 - Introduction to Cultural Anthropology (3)**
Introduces the diversity of human social life as shaped by culture, relating the origins and nature of culture to variations in such universal aspects of human experience as subsistence strategies, resource allocation, social organization, political order, belief systems and the arts.

**ANTH 103 - Archaeology and Culture (3)**
Explores the long-term development of human culture from its beginnings to the present through archaeological and material perspectives. Presents a global survey of world prehistory and focuses upon the major cultural trends and key transitions in the prehistoric past. Emphasizes the use of archaeological methods and information in reconstructing global culture history.

**ANTH 105 - Introduction to Biological Anthropology (3)**
Introduces students to human variation over space and time; its genetic, developmental, environmental, and theoretical bases; the human life cycle; primatology; the anthropoid fossil record, and the relevance of these for an understanding of human health, adaptation, and human diversity.

**ANTH 111 - Anthropology of Everyday Life (3)**
Examines what anthropology can teach us about everyday life in a diverse world. Explores how societies and individuals are affected by increasing contact between people of different cultures. It takes historical and cross-cultural perspectives on the human condition and the cultural adaptations required in a changing world.

**ANTH 231 - Introduction to Native American Studies (3)**
Introduction to the major topics within the field of Native American Studies including the ethnohistory of Native North Americans; cultural diversity within Native North America and contemporary aesthetics, literature, and film.

**ANTH 241 - Gender, Sex, and Sexuality (3)**
Provides an introduction to the study of sex, gender, and sexuality in anthropology. Examines sex, gender, and sexuality through cross-cultural case studies from around the world. Explores different theoretical models that anthropologists use to understand the role of gender, sex, and sexuality in different contexts. Studies various manifestations of masculinity and femininity around the globe as they relate to power, political economy, and identity (e.g. race, ethnicity, sexuality, religion).
Not open to students who have credit in ANTH 441.

**ANTH 242 - Folklore and Folklife (3)**
Introduction to the role of tradition in various aspects of American culture, from humor to architecture; the functions of these elements in society; and methodological and theoretical approaches to their study, with comparative examples from Ireland and Great Britain.

**ANTH 308 - Introduction to Anthropological Linguistics (3)**
Basic concepts, scope, and methodology of the science of language with particular emphasis on non-European languages and cultural components of language. Knowledge of a foreign language is helpful. Prerequisite: ANTH 101.

**ANTH 310 - Topics in Old World Prehistory (3 TO 6)**
Prehistory of various Old World regions and time periods. Topics will vary from semester to semester—for example, Europe, the Paleolithic, general survey. May be repeated with different topics. Prerequisite recommended: ANTH 101. A total of 6 credits may be earned.

**ANTH 312 - Ecological Dimensions of Culture (3)**
Explores the system of relationships between human populations and their environments focusing on cultural behavior. Uses studies of societies from ancient to modern times, models and theories from ecology and anthropology, and considers both applied and theoretical perspectives. Prerequisite: any one of ANTH 101, 103, 105, 111; or permission of the instructor.

**ANTH 313 - Fundamentals of Archaeology (3)**
Introduces the types of data dealt with by archaeology, approaches to data recovery, methods of analysis, and problems of interpretation. The differing problems of traditional research archaeology and modern archaeological resources management are considered. Prerequisite: ANTH 103 or permission of the instructor.

**ANTH 314 - Applied Anthropology (3)**
Investigates the social problems and work that engage the attention of anthropologists outside the university setting. Examination of the skills needed to supplement those traditionally taught in anthropology. Prerequisite: ANTH 101 or 111 or permission of the instructor.

**ANTH 315 - Human Paleontology (3)**
Fossil record of the evolution of humans and their primate predecessors.
Prerequisite: ANTH 105 or permission of the instructor.

**ANTH 342 - Anthropology of the United States (3)**
Examines the values, beliefs, and experiences of different groups of people in the United States through the lens of identity (how one views oneself), identification (how others view that individual), and inequality. Explores contemporary intersections of race, class, gender, religion, sexuality, and/or political ecology, as well as historical influences on those categories, like colonialism. Addresses how different groups work to challenge inequality, develop resilience, and build solidarity in the nation.
Prerequisite: AFAM 100, ANTH 101, ANTH 111, or WGS 201 or permission of the instructor.

**ANTH 343 - Historical Archaeology of Eastern United States (3)**
Explores primary historical processes and archaeologically significant trends in material culture that have shaped modern life from A.D. 1500 to the 20th century.
Prerequisite: ANTH 103 or permission of the instructor.

**ANTH 364 - European Prehistory (3)**
Prehistory of Europe from the Paleolithic through the Iron Age with an emphasis on the regions north and west of the Classical world.
Prerequisite: ANTH 103 or permission of the instructor.

**ANTH 369 - Paid Internship in Anthropology (1 TO 3)**
Paid, supervised field or laboratory experience in anthropology. Employment should supply an opportunity to use and further knowledge of anthropology.
Prerequisite: permission of the internship director.
A total of 3 credits may be earned.
A total of 3 internship credits will count towards the major or minor either from ANTH 369 or 479.
Open only to anthropology majors or minors.

**ANTH 401 - History of Method and Theory in Anthropology (3)**
Surveys the major ideas and issues of anthropology over time. Includes methods and theories from archaeology, physical anthropology, linguistics, and cultural anthropology.
Prerequisite: ANTH 101 or permission of the instructor.
Open only to juniors and seniors.

**ANTH 406 - Life History Theory of Growth, Maintenance, and Reproduction (3)**
Life history approach to human physical growth and development, somatic maintenance, and reproduction; its regulation, variation, and assessment in different places.
Prerequisite: ANTH 105 or permission of the instructor.

**ANTH 409 - Digital Anthropology (3)**
Includes a survey of anthropological theory and methods related to digital anthropology. Students will learn a historical overview of digital anthropology. Focuses on 1) virtual worlds, online games, and social networking sites; 2) ethnographic approaches, including questions of theory and method; and 3) theorizing indexical relationships between the virtual and actual. Students will collectively explore and identify other facets of digital anthropology and of doing ethnographic work digitally.
Prerequisite: ANTH 101 or permission of the instructor.

**ANTH 416 - Human Osteology (3)**
Laboratory dealing with the human skeleton including identification of whole and fragmentary bones and the assessment of the age, stature, sex, and race of a skeleton as applied to paleodemography, paleopathology, and forensic problems.
Prerequisite: ANTH 105 or permission of the instructor.

**ANTH 417 - Forensic Anthropology (3)**
Includes a survey of the anthropological methods and techniques used to recover and identify human skeletal remains in criminal and disaster investigations. Concepts and methods from other disciplines including anatomy, botany, and entomology are discussed. Topics will include skeletal identification, time since death, causes of death, pathology, and quantitative analysis.
Prerequisite: ANTH 105 or BIO 100 or CHEM 100 or permission of the instructor.

**ANTH 420 - Topics in New World Archaeology (3 TO 6)**
Prehistory of various New World regions or developmental periods. Topics will vary from semester to semester—for example, Meso-America, the Southwest, general survey. May be repeated for different topics.
Prerequisite recommended: ANTH 103.
A total of 6 credits may be earned.
ANTH 427 - Culture and Medicine (3)
Focuses on conceptions of health and illness from a crosscultural perspective relating non-Western techniques to Western counterparts.
Prerequisite: ANTH 101.

ANTH 429 - Laboratory Methods in Material Culture (3)
Addresses artifacts as reflections of culture. Focuses on ethnoarchaeology and experimental archaeology, as well as the integration of research design, recovery, identification, and laboratory analysis of artifacts from archaeological sites.
Prerequisite: ANTH 103 or 313 or permission of the instructor.

ANTH 432 - Native Americans of the Eastern Woodlands, 16th-20th Century (3)
Provides an ethnohistorical overview of North America’s Eastern Woodlands from first encounters between indigenous people, Europeans and Africans to the 20th century. Covers indigenous cultural diversity at the time of contact and the social, environmental, economic and political dimensions of early colonialism, enslavement and settler colonialism in the region.
Prerequisite: ANTH 101 or permission of the instructor.

ANTH 434 - Midwestern Archaeology (3)
Prehistoric cultural developments in the Midwest traced through the Paleoindian, Archaic, Woodland, and Mississippian periods and focused on the nature and questions of archaeological research in the region.
Prerequisite: ANTH 103 or 313 (or equivalent) or permission of the instructor.

ANTH 445 - Archaeological Field School (3 TO 6)
Designed to provide students with the practical application of archaeological methods, techniques, and strategies in a field setting. Students will participate in a supervised investigation of a formal archaeological problem at an actual archaeological site or at an experimental site.
Prerequisite: permission of the instructor.
A total of 6 credits may be earned.

ANTH 450 - Ethnographic Field School (3 TO 6)
An intensive immersion in the methods of field research in cultural anthropology. Emphasizes problem formulation, observation, interviewing, writing, and interpretation of field data. Field schools are intended to provide specific skills that result in an ethnographic report.
Prerequisite: an introductory and upper division course in cultural anthropology; permission of the instructor.

A total of 6 credits may be earned.

ANTH 451 - Witchcraft, Magic, and Religion (3)
Anthropological study of humankind's age-old concern with life, death, sickness, and the unknown. Discusses human attempts to control life through supernatural beings, prayer, sacrifice, and techniques of magic and witchcraft.
Prerequisite: ANTH 101 or permission of the instructor.

ANTH 452 - Anthropology of Technology (3)
Will review the anthropological literature on technology, focusing on cultural and comparative aspects of technology. This subfield's theoretical base and research methods will also be assessed.

ANTH 455 - Primatology (3)
Comparative survey of nonhuman primates, their biology and behavior.
Prerequisite: ANTH 105 or permission of the instructor.

ANTH 457 - Applied Archaeology (3)
Special problems of contract, conservation, and public archaeology, including laws and guidelines, relations with governmental and private agencies, research design and proposals, field and laboratory methods, and curation.
Prerequisite: ANTH 313 or permission of the instructor.

ANTH 459 - Ethnographic Methods (3)
Develops the ability to conduct and comprehend ethnographic research. Includes research design, data collection, analysis, reporting, basic statistics, and computer use. Emphasizes both quantitative and qualitative techniques for basic and applied research.
Prerequisite: 15 credits in ANTH or permission of the instructor.

ANTH 462 - Special Topics in Biological Anthropology (3 TO 6)
Detailed analysis of a special problem in biological anthropology such as paleopathology or reproduction and culture. May be repeated for different topics.
Prerequisite: ANTH 105 or permission of the instructor.
A total of 6 credits may be earned.

ANTH 463 - Theory and Method in Historical Archaeology (3)
Provides a detailed summary of theory and methods used by historical archaeologists, including social theory, historical methods, and archaeological analysis methods.
Prerequisite: ANTH 103 or permission of the instructor.
**ANTH 471 - Ethnohistory (3)**  
Methods and theories of ethnohistory introduced by emphasizing how culture and history intersect with race, ethnicity, gender, class, and sexuality; a research-intensive class.  
Prerequisite: ANTH 101 or permission of the instructor.

**ANTH 479 - Unpaid Internship (1 TO 3)**  
Unpaid field or laboratory experience that uses knowledge of anthropology in a specific project or work content.  
Prerequisite: permission of the internship director.  
A total of 3 credits may be earned.  
A total of 3 internship credits will count towards the major or minor either from ANTH 369 or 479.  
Open only to anthropology majors or minors.

**ANTH 490 - Independent Study in Anthropology (1 TO 3)**  
Topics to be chosen and investigated in consultation with an instructor with competence in the area involved.  
A total of 3 credits may be earned.

**APHY - APPLIED PHYSICS**

**APHY 310 - Introduction to Nanoscience and Technology (3)**  
Explores science and technology at the nanoscale. Studies the physical properties of nanomaterials, the tools and techniques for nanosystem fabrication and investigation; principles of mechanical, optical, electrical, and magnetic nanosystems; current state of technology in physics, chemistry, biology, engineering, and information systems; and future applications.  
Prerequisite: PHYC 260.

**APHY 312 - Fundamentals of Nano Materials Growth and Device Fabrication (4)**  
Introduces basic experimental techniques in: nano materials growth, nano devices fabrication, and materials and devices characterization. Introductory laboratory in the field of nanoscience and technology. Intended for those interested in semiconductor technology or experimental work in general.  
Prerequisite: PHYC 260 or permission of the department chairperson.

**APHY 315 - Medical Physics 1 (3)**  
Biomechanics, statistical physics, bioelectric fields, biomagnetic fields, electricity and magnetism at the cellular level.  
Prerequisite: PHYC 112 or 122.

*Prerequisites recommended: BIO 111, 215; MATH 165 and 166.*

**APHY 316 - Medical Physics 2 (3)**  
Signal analysis, images, biomagnetism, x-rays, nuclear medicine, magnetic resonance imaging.  
Prerequisite: PHYC 260; APHY 315 or permission of the department chairperson.

**APHY 420 - Solar Thermal Systems (3)**  
Physics of the solar energy resource, solar collection, concentration, thermal conversion, energy storage, and the design and performance of solar thermal energy systems.  
Prerequisite: MATH 166 and PHYC 122.

**APHY 422 - Photovoltaics (3)**  
Physics of photovoltaic systems, including basic operating principles, design and technology, and performance of individual solar cells and solar cells systems.  
Prerequisite: APHY 420.

**AQUA - AQUATICS**

**AQUA 120 - Aquatics Special Topics/Workshop (1 TO 3)**  
Designed to consider a variety of different issues, problems, and skills in aquatics. Offerings have included but are not limited to: special water rescue, SCUBA archeology, underwater navigation, search and recovery, introduction to cave diving, technical SCUBA diving, and first responder instructor.  
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**AQUA 190 - Introduction to Aquatics (3)**  
An introduction to such topics as career opportunities, industry trends, and industry practice. Aquatics concepts, theory, and publications will be discussed. Aquatic related terminology, research, and fundamentals to aquatic oversight are studied.

**AQUA 212 - Aquatic Recreation Activities (3)**  
Provides entry-level knowledge and skill practice in canoe, kayak, sailing, water polo, and synchronized swimming. Students learn the basics in each of these areas including nomenclature, rules and regulations as appropriate for the content area. Students with entry-level swimming skills are welcome. Lab fee required.

**AQUA 214 - Beginning Swimming (1)**  
Introduces nonswimmers or novices to basic skills and strokes of swimming and diving.
Not open to deep water swimmers.

AQUA 215 - Intermediate Swimming (1)
Designed for all physical education majors and aquatic students looking to improve their stroke techniques. Emphasizes basic performance techniques in swimming, diving, and aquatic skills. Prepares students for success in the AQUA 315 (WSI) course.
Prerequisite: successful completion of entry-level skills tests.

AQUA 216 - Lifeguard Training (3)
Teaches the skills and knowledge necessary to become a certified lifeguard. Includes CPR, FA, AED, 02, and PDT Training. Advanced topics include techniques for open water and surf rescue. Optional certification fee.
Prerequisite: successful completion of intermediate swimming skills test.

AQUA 219 - Aquatic Sports Officiating (1)
An introduction to the theory and practice of officiating swimming and springboard diving.

AQUA 220 - Open Water Scuba (2)
Beginning scuba composed of lecture sessions, confined water (pool), and open water sessions. Provides a level of understanding to participate in skin and scuba diving activities safely. Special fee required.
Prerequisite: successful completion of entry-level skills test.

AQUA 221 - Advanced SCUBA Diver (2)
Series of open water dives and lectures on advanced diving and lifesaving subjects. Optional certification fee.
Prerequisite: AQUA 220 or basic level certification with permission of the instructor.

AQUA 224 - Divemaster (2)
Provides knowledge and practical experience needed to lead scuba activities. Includes experience in classroom, pool, and open water activities.
Prerequisite: AQUA 221 or permission of the program coordinator.

AQUA 225 - Assistant Scuba Instructor (2)
Provides experience and knowledge necessary to teach scuba diving. The student works with and under the guidance of a SCUBA instructor Trainer. Includes experience in classroom, pool, and open water activities.
Prerequisite: AQUA 224; permission of the program coordinator.

AQUA 260 - Emergency Medical Responder (3)
Provides knowledge and experiences in Emergency Medical Responder skills. Instruction includes training in assessment, CPR, First Aid, Automated External Defibrillation, Oxygen administration, and other advanced care. This is not a state-sanctioned Emergency Medical Responder course.

AQUA 301 - Instructor of CPR and First Aid (2)
Emphasizes teaching methodologies and delivery of nationally recognized programs in first aid, CPR, and bloodborne pathogens. Instructor certification available.
Prerequisite: current basic level first aid and CPR certification.

AQUA 313 - Biomechanics of Aquatics (2)
Provides an opportunity to observe, participate, experiment with, and apply biomechanical principles in swimming. Students will be able to observe and evaluate competitive swimming, competitive diving, recreational swimming, and therapeutic exercise.

AQUA 314 - Teaching and Coaching Swimming and Diving (3)
Focuses on the application of skills, tactics, and strategies of competitive swimming and diving. Includes entry level to advanced knowledge concepts and skills. Competitive swimming and diving experience is not needed. Skill sessions take into account the student's individual willingness and abilities.

AQUA 315 - Water Safety Instructor (WSI) (3)
Swimming and rescue skills necessary to complete certification for a Water Safety Instructor program. Emphasizes a broad range of other aquatic experiences and teaching methodologies. Optional certification fee.
Prerequisite: successful completion of swimming test.

AQUA 316 - Aquatic Fitness Instructor (3)
Introduction to the objectives, format, and water exercise classes, emphasizing participation and application of fitness and related concepts to selected water aerobic activities. Optional certification fee.
Prerequisite: successful completion of swimming test the first week of class.

AQUA 355 - Internship in Aquatics (1 TO 3)
Permits credit for aquatic experiences in categories of leadership, administration, or operation of aquatic programs or facilities.
Prerequisite: AQUA 221; permission of the program coordinator.
A total of 3 credits may be earned.
Open only to scuba minor students.

**AQUA 404 - Lifeguard Instructor (LGI) (3)**
Trains students to be Lifeguard Instructors. Training includes LG, CPR, FA, AED, 02, and PDT skills. Advanced topics include open water and surf techniques. Certification available upon successful completion. Optional certification fee.

**AQUA 454 - Swimming Pool Operation and Maintenance (3)**
Provides information on pool circulation, filtration, sanitation, and administrative procedures for the pool operator or aquatics specialist. Opportunity to earn operation credentials with successful completion.

**AQUA 455 - Aquatic Facilities Management and Programming (3)**
Study of organization and administration to prepare the aquatic professional for management of indoor and outdoor facilities. Includes facility inspection, safety and sanitation procedures, and activity, sport, and recreational aspects of pools, lakes, camps, and beach fronts.

**AQUA 456 - Camp Waterfront Administration (2)**
A study in camp specific programming, waterfront safety, design, and administration.

**AQUA 457 - Aquatic Facility Design (2)**
A study in swimming pools, their design, and utilization. Includes lighting, basin design, and deck construction for commercial pools. No previous architecture experience required.

**AQUA 458 - Aquatic Leadership and Staff Development (3)**
Provides information to become an effective leader. Aquatic facility financial management is discussed in depth, as accounting principles apply to aquatic facilities. Certification for aquatic leadership is available if the student meets the required qualifications. Optional certification fee.

**AQUA 479 - Aquatics Internship (12)**
Full-time work and learning practical experience on- or off-campus in an aquatic-related setting.
Prerequisite: permission of the program coordinator.
Open only to aquatic degree students.

**AR - ARABIC**

**AR 101 - Beginning Arabic 1 (5)**
The first course in beginning Arabic language.

**AR 102 - Beginning Arabic 2 (5)**
The second course in beginning Arabic language.
Prerequisite: AR 101.

**AR 201 - Intermediate Arabic 1 (4)**
Designed for students with credit in AR 101 and 102. Builds upon the skills in beginning Arabic in listening, speaking, reading, and writing Arabic, and increases knowledge of Arabic cultures.
Prerequisite: AR 102 or its equivalent.

**AR 202 - Intermediate Arabic 2 (4)**
Designed for students with credit in AR 201. Further enhances skills in listening, speaking, reading, and writing Arabic, and increases understanding of Arabic cultures.
Prerequisite: AR 201 or its equivalent.

**AR 205 - Language and Culture of the Arab World (3)**
Provides an overview of the main aspects of contemporary Arab cultures. Based on scholarly research, textual resources, and media from the Arab World. The goal is to examine the Arab people’s cultural background, language varieties, and representative social institutions. Presents a rich educational experience for promoting analytic skills and insights into another culture and its complexities. Taught in English.

**AR 301 - Advanced Arabic 1 (3)**
Designed for students with credit in AR 202. Further skill development in the idiomatic use of the Arabic language and increased understanding of the Arab culture.
Prerequisite: AR 202 or permission of the department chairperson.

**AR 302 - Advanced Arabic 2 (3)**
Designed for students with credit in AR 301. Enhances skills in fluent idiomatic use of the Arabic language and understanding Arab culture. Includes an introduction to some of the masterpieces of Arab literature in translation.
Prerequisite: AR 301 or permission of the department chairperson.

**AR 334 - Ethnic, Cultural, and Linguistic Diversity in the Arab World (3)**
An advanced survey course in Arab culture and civilization intended for students who have completed AR 202 or the equivalent. The main objective is to offer a first-hand
exposure to the linguistic, cultural, and ethnic diversity in the Arab world.
Prerequisite: AR 202 or permission of the department chairperson.

**AR 335 - Special Topics in Arabic Civilizations and Cultures (3)**
Development of the Arab world to the present. The main objective is to analyze the crucial transformations of Middle Eastern societies.
Prerequisite: AR 202 or permission of the department chairperson.
A total of 6 credits may be earned in courses with different topics.

**AR 400 - Arabic Study Abroad (3 TO 9)**
Study of intermediate or advanced Arabic language, linguistics, and culture in a foreign country where Arabic is the native language. May include seminars arranged during travel.
Prerequisite: permission of the department chairperson.
A total of 9 credits may be earned.

**ARCH - ARCHITECTURE**
**ARCH 100 - Introduction to Architecture (2)**
An introduction to architecture through an exploration of products of the built environment.
Open to all students.

**ARCH 103 - Architectural Design Studio (6)**
Introduction to architectural form manipulation skills in both green field and built environments. Focus on design moves linking concepts of site, schematic building structure, materials, and forces of human habitation. Design reasoning and spatial thinking, vocabulary, concept formulation, use of precedents, and basic investigative skills are linked to basic ways of building in both individual and collaborative design exercises.
Prerequisite: graduate standing or permission of the program director.

**ARCH 163 - Architectural Communications Media (4)**
Introduction to architectural design representation techniques and media, including freehand drawing, orthographic and perspective drawing, analytic drawing, concept diagramming, and 3-D modeling.
Prerequisite: graduate standing or permission of the program director.

**ARCH 201 - Architectural Design (4)**
Introduction to the architectural design sequence. Projects focus on conceptual architectural design and design methodologies in small and intermediate-scale projects, introduction of architectural technology, research, analysis, and programming.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

**ARCH 202 - Architectural Design (4)**
Conceptual architectural design and design methodologies in large-scale projects; introduction of architectural technology, research, analysis, and programming. Workshops in the exploration and development of visualization and communication skills at all stages of the design process.
Prerequisite: ARCH 201.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

**ARCH 203 - Architectural Design Studio (4)**
Design projects of moderate scale and complexity consider tectonic issues, enclosure, territory and movement paths. Projects address concepts of space and place in the context of a variety of building types, ordering systems, and theories. Continued development of digital and manual visualization methods.
Prerequisite: graduate standing or permission of the program director.

**ARCH 214 - Architectural Building Technology 1 (3)**
Methods and materials of architectural construction. Emphasizes interface of material selections and construction technology in the design, production, and construction process.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

**ARCH 218 - Structural Systems 1 (3)**
Basic introduction to the mathematical foundations of statics—equilibrium, balance, centroids, neutral axis—with primary focus on developing a basic understanding of concepts of conditions of equilibrium and force systems.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

**ARCH 229 - History of Architecture 1 (3)**
A survey of the major movements in Western architecture and urbanism from antiquity through the nineteenth century, and an introduction to developments in vernacular and high-style architecture outside the West in precolonial and/or post-colonial periods.
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Prerequisite: ARCH 100.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design; HP minors or permission of the department chairperson.

ARCH 251 - Introduction to Social and Environmental Justice in Design (3)
Introduces students to the essential role that architecture plays in promoting socially and environmentally just communities by acknowledging the values of human rights, social equity, and the dignity of every human being.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 261 - Design Communications Media (1)
Exploration of a variety of communications media including pencil, ink, pastel, markers, watercolor, and photography.
Prerequisite: CAP 162.
Open only to architecture majors.

ARCH 263 - Digital Design (3)
Introduction to the use of digital technology in architecture with an emphasis on design applications. Introduction to a wide range of digital programs, techniques, and skills. Development of judgment and discernment regarding the use of computers in architectural design.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 273 - Environmental Systems 1 (3)
Introduction to environmental systems in architecture with emphasis on passive interventions.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 301 - Architectural Design (5)
Integration of all facets of design including design, research, programming, technology, function, human behavior, scheduling, time management, communication, use of materials, and systems. Workshops in the further exploration and development of visualization and communication skills at all stages of the design process.
Prerequisite: ARCH 202.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 302 - Architectural Design (5)
A rigorous in-depth exploration of a selected topic in architectural design. Design studio and seminar in theories and principles related to the selected topic.

Prerequisite: ARCH 301.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 304 - Architectural Design Studio (5)
Design of increasingly complex projects with documentation of structure, materials, construction methods, and life safety. Continued emphasis on concept development vis-a-vis historical and contemporary architectural thought and project context in all its dimensions. Reinforcement and application of sustainability principles including passive/active systems and day-lighting.
Prerequisite: graduate standing or permission of the program director.

ARCH 314 - Architectural Building Technology 2 (3)
Methods and materials of architectural construction. Emphasizes interface of material selections and construction technology in the design, production, and construction process. Production of construction documentation.
Prerequisite: ARCH 214.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 318 - Structural Systems 2 (3)
Strength of materials, stress, strain, and modulus of elasticity. Introduction to steel systems and their application to the design of horizontal and vertical building systems. Introduction to lateral force systems for earthquake and wind.
Prerequisite: ARCH 218.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 320 - Introduction to Professional Practice (3)
Exposure to diverse practice models in architecture and related fields (professional mentorship, case study research, analysis of diverse roles and relationships of key stakeholders in the architectural profession and allied disciplines) and application of these experiences to practice scenarios (role playing, collaborative teamwork and practice plan development/marketing proposals). Provides experience with the diverse breadth of architectural practices to inform students’ professional path.
Open only to B.Arch; BA/BS architecture; environmental design.

ARCH 329 - History of Architecture 2 (3)
Survey of the movements and major figures in architecture and design from the late nineteenth century to the present,
with consideration given to the social and cultural context
of design ideas. Prerequisite: ARCH 229.
Open only to B. ARCH; BA/BS architecture; BA/BS
environmental design; HP minors or permission of the
department chairperson.

**ARCH 340 - Introduction to Historic Preservation for Architects (3)**
The introduction of historic preservation in the context of
architectural practice. Students will become familiar with
the significant public and private Preservation agencies and
organizations, along with the roles they play in the
Preservation movement. The legal basis of preservation
will be surveyed, as well as the process for documenting,
designating, and protecting historic properties.
Preservation treatment and re-use options will be discussed
in light of conservation, sustainability and cultural
continuity.
Open only to B. ARCH; BA/BS architecture; BA/BS
environmental design.

**ARCH 373 - Environmental Systems 2 (3)**
Application of the principles of physics to the design and
engineering of environmental systems in buildings and
technologies of active intervention.
Prerequisite: ARCH 273.
Open only to B. ARCH; BA/BS architecture; BA/BS
environmental design.

**ARCH 400 - Comprehensive Architecture Studio (6)**
Architecture studio involves architectural design
explorations requiring integrated evaluations and decision-
making in the design process. Projects will demonstrate
consideration and integration of environmental and
structural systems, environmental stewardship, technical
documentation, accessibility, site conditions, life safety,
and building envelope systems and assemblies.
Prerequisite: ARCH 302.
Parallel: ARCH 420.
Open only to B. ARCH majors.

**ARCH 401 - Architectural Design (5)**
Capstone project: a design-based study in depth requiring
students to reflect on and synthesize previous course
work.
Prerequisite: ARCH 301.
Open only to BA/BS architecture.

**ARCH 402 - Architectural Design (6)**
ARCH 402 allows students to engage in architectural
design projects on or off campus providing students a high
degree of self-direction. Draws on knowledge and skills of
previous course work. Both ARCH 405 and 406 (two
independent summer programs) must be completed to
obtain substitute credit for ARCH 402.
Prerequisite: ARCH 301.
Open only to BA/BS architecture.

**ARCH 403 - Architecture Design Studio (6)**
Architecture design studio investigating topical
architectural problems that may have an interdisciplinary
and/or applied aspect. Within this, students are expected to
increasingly define their design values and effective
methods for engaging and representing them.
Prerequisite: ARCH 400.
Parallel: ARCH 424.
Open only to B. ARCH.

**ARCH 404 - Architecture Final Project Studio (6)**
Conceptual and design development processes applied to a
student initiated and defined architecture design final
studio project.
Prerequisite: ARCH 403.
Open only to B. ARCH majors.

**ARCH 405 - Architectural Design (3)**
Incremental versions of ARCH 402 that allow students to
engage architectural design projects on or off campus
providing students a high degree of self-direction. Draws
on knowledge and skills of previous course work. Both
ARCH 405 and 406 (two independent summer programs)
must be completed to obtain substitute credit for ARCH
402.
Prerequisite: ARCH 202.
Open only to architecture majors.

**ARCH 406 - Architectural Design (3)**
Incremental versions of ARCH 402 that allow students to
engage architectural design projects on or off campus
providing students a high degree of self-direction. Draws
on knowledge and skills of previous course work. Both
ARCH 405 and 406 (two independent summer programs)
must be completed to obtain substitute credit for ARCH
402.
Prerequisite: ARCH 202.
Open only to architecture majors.

**ARCH 407 - Fourth World Theory (3)**
Fourth World Theory examines the physical, political,
socio-economical and institutional abandonment of the
American Inner-city and investigates the causes which
have led to the massive disinvestment. This course
attempts to develop a sense of empathy for the citizens
who choose or are forced to remain in these often severely distressed environments. Fourth World Theory employs critical inquiry that may better qualify us to be engaged in improving the conditions of our inner cities and of the United States as a whole.

ARCH 408 - Architects of Hope (3)
A growing subset of architects situates their talents and passions in the lives of persons occupying exploding equatorial megacities and shrinking inner cities in the Rust Belt. Students will consider a range of issues engaged by the persons who remain in these places. Seminar participants will study as well as interview architects and designers whose practices are centered on those people generally considered to be at-risk or in-need. In response to this investigation, each student will formally define and articulate a more meaningful career trajectory.

ARCH 418 - Structural Systems 3 (3)
Continuation of Structural Systems 2. Introduction to wood, concrete, and masonry systems and their application to design of horizontal and vertical building systems. Discussions of alternative structural building materials and systems.
Prerequisite: ARCH 318.
Open only to B.ARCH; BA/BS architecture; BA/BS environmental design.

ARCH 420 - Professional Practice (3)
Overview of the essential aspects of the architectural profession. Subjects include: stakeholder roles in architecture; project management; business practices; financial considerations; legal responsibility; ethics and professional conduct.
Parallel: ARCH 400.
Open only to B. ARCH majors.

ARCH 421 - Topics in the History of Oriental Architecture (3)
Analysis of theoretical, cultural, and historical determinants as they may be applied to a selected array of architects and buildings from the Islamic world to the Far East.
Prerequisite: ARCH 329; permission of the department chairperson.

ARCH 424 - Research and Programming Methods in Architecture (3)
Exposure to methods and procedures of architectural research and programming, including case studies. Application of these methods to research and programming for development of individual final project proposals for the architecture final project studio.
Parallel: ARCH 403.
Open only to B. ARCH majors.

ARCH 426 - Preservation and Documentation of Historic Buildings (3)
Introduces the special qualities of design and craftsmanship in historic buildings, districts, and landscapes. Emphasizes skills needed to document historic properties through written and graphic means. Surveys guidelines for rehabilitation and criteria for identifying historic properties.
Prerequisite: ARCH 329.

ARCH 427 - Philosophy of Architecture (3)
Seminars and independent study in the background and development of prevailing philosophies of architecture, ideas in design, and how they evolved in contemporary architecture since the beginning of the twentieth century, concluding with their influence on the current practice of architecture.

ARCH 428 - History of Architecture in the Built Environment (3)
The roots and development phases of American architecture and design are explored, beginning with Native American and Colonial examples, through the exploration, development, urbanization, industrialization, modernist and post-industrial epochs. Both vernacular and high style design examples are covered, with emphasis on regional and cultural diversity. Design examples are drawn from the fields of architecture, landscape architecture and urban planning.
Prerequisite: permission of the program director.

ARCH 429 - Application of Cultural Issues to Design and Planning Strategies (3)
Explores how to use social, cultural, technical, and economic information to establish design criteria. Examines how to apply this knowledge to create a framework for design.
Prerequisite: fourth-year standing or permission of the department chairperson.

ARCH 430 - History of Architecture, Planning, and Engineering in the Midwest (3)
Analysis of the development of architecture, planning, engineering (canals, railroads, roads, bridges), and industrial architecture in the Midwest from the frontier period through the twentieth century.
Prerequisite: permission of the program director.
ARCH 437 - Topics in the History of 19th- and 20th-Century Architecture (3)
Analysis of theoretical, cultural, and historical determinants as they may be applied to a selected array of architects and buildings from around 1800 to the present.
Prerequisite: ARCH 329; permission of the department chairperson.

ARCH 440 - Introduction to Preservation (3)
This course presents the history, philosophy and current practice of heritage preservation. Students examine the roles of significant public, private and non-profit preservation agencies and organizations. The legal basis of preservation is studied, as well as the process for documenting, designating and protecting heritage places. Preservation treatment and re-use options are examined in light of conservation, sustainability and cultural continuity concerns.
Prerequisite: permission of the program director.
Open only to HP minors or by permission of the HP director.

ARCH 441 - Preservation Policy (3)
This course examines the structure and function of international, federal, state and local laws and programs governing heritage preservation activities. Planning and economic development aspects of preservation practice are studied in the context of conservation and protection of heritage places.
Prerequisite: permission of the program director.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design; HP minors or permission of the HP director.

ARCH 444 - Historic Preservation Economics (3)
Developing skills in assessing the economics of preserving historic properties. Emphasizes exercises involving feasibility studies, pro formas, revolving funds, and identification of feasible users. Surveys also Main Street program and heritage tourism and heritage areas as revitalization techniques.
Prerequisite: permission of the program director.

ARCH 445 - Historic Preservation Design and Graphic Documentation (3)
Introduction to graphic techniques, methods, and design processes used in the documentation and recordation of historic properties, with emphasis on manual and computer aided measured drawing and representation, laser technologies, photo documentation, laboratory and field procedures, interpretation of physical conditions, and the design and development of presentation techniques.
Prerequisite: permission of the program director.

ARCH 447 - Preservation Technology (3)
An investigation of the materials and systems of construction used in historic buildings. Students examine contemporary technology used to document, analyze and diagnose building conditions as a basis to formulate interventions for the stewardship of historic structures.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design; HP minors or permission of the HP director.

ARCH 449 - Historic Preservation Technology 2 (3)
Survey of the methods and philosophies of conservation and rehabilitation for historic buildings. Emphasizes identifying appropriate solutions to problems of deterioration and appropriate rehabilitation and restoration approaches. Field trips, laboratory analysis, and projects.
Prerequisite: permission of the program director.

ARCH 455 - Architectural Internship (0)
Prepares students for critical engagement in architectural practice. Field studies in architecture under the supervision of a licensed architect or allied design professional. Under certain conditions this internship may apply toward the Architectural Experience Program (AXP).
Prerequisite: permission of the internship program director or the department chairperson.

ARCH 473 - Current Issues in Preservation (3)
This course provides an in-depth investigation of complex social, cultural and political case studies in contemporary heritage preservation. A foundation is laid for development of individual philosophies and ethics regarding preservation practice.
Prerequisite: permission of the program director.
Open only to B. ARCH; BA/BS architecture; BA/BS environmental design; HP minors or permission of the HP director.

ARCH 490 - Independent Project (1 TO 6)
Independent study in architectural topics.
Prerequisite: approval of an independent study proposal by the department chairperson.
A total of 8 credits may be earned, but no more than 6 in any one semester or term.
ARCH 495 - Architecture History/Theory Elective (3 TO 6)
Timely architectural projects undertaken by groups. Counts towards architecture history/theory elective credit.
Prerequisite: permission of the department chairperson. A total of 15 credits may be earned, but no more than 6 in any one semester or term.
Open only to architecture majors.

ARCH 498 - Special Project in Architecture (3 TO 6)
Special and timely architectural projects undertaken by groups of students.
A total of 15 credits may be earned, but no more than 6 in any one semester or term.
Open only to architecture majors and historic preservation minors.

ART - ART
ART 100 - Art Orientation (1)
Introduces first year art majors to the departmental, collegiate, and university courses, programs, and policies. Assists art majors in the transition to university life and equips them with skills and knowledge for navigating academics, community, and culture in the School of Art.
Open only to School of Art majors.

ART 200 - Introduction to Computer Art (3)
Introductory studio experience in the use of digital technology in the fine arts. Topics include digital imaging, motion graphics, editing, and computer animation. This course will also trace technologically driven art from pioneering efforts to current trends, and the central role played by computers in the field of electronic art.
Open only to School of Art majors.

ART 210 - Animation: Introduction to 3D (3)
Provides an introduction to techniques of three-dimensional computer graphics, as well as the fundamental concepts and philosophy of animation. The techniques include 3D modeling, digital lighting and shading, and basic animation. Autodesk Maya is the primary software to complete the course assignments.
Prerequisite: ADS 101 and 102 and 103 and AFA 101.
Open only to Animation majors.

ART 211 - Traditional Animation (3)
Introduces classic animation principles, experimentation, observation, professional practices, and project refinement.
Prerequisite: ADS 101 and 102 and 103 and AFA 101.
Open only to Animation majors.

ART 231 - Photography: Black and White Darkroom (3)
Introduction to film photography and darkroom printing as an expressive art form emphasizing the development of photographic vision as well as technical proficiency. Students furnish their own 35mm film cameras with a working light-meter, adjustable aperture, adjustable shutter speed, and manual focusing.
Prerequisite: ADS 101 and AFA 101.
Open only to School of Art majors and minors.

ART 232 - Photography: Darkroom to Digital (3)
Emphasizes medium-format film cameras, converting film to digital, digital capture, digital printing basics and an introduction to color photography. Continued exploration of contemporary fine art photography production, issues and theory.
Prerequisite: ART 231.
Open only to School of Art majors and minors or by permission of the instructor.

ART 233 - Photography: Fine Art Digital Imaging (3)
Emphasizes fine art image making, focusing on the use of photographic images within the digital environment. Topics include: techniques and aesthetics of digital imaging, digital cameras, scanning, fine art printing, and color management. Subtle image enhancement to complex compositing and manipulation will be explored.
Prerequisite: ART 200 and 231 or by permission of the professor.
Open only to School of Art majors and minors.

ART 234 - Intermedia: Experimental Video (3)
Comprehensive introduction to experimental video and its impact on contemporary new media art practices, surveying new media video art and artists in a range of formats including installation and performance. Technical demonstrations and workshops will cover camera, sound, lighting, pre-production, and digital editing techniques.
Prerequisite: ADS 101 or 103 or by permission of the instructor.
Open only to School of Art majors and minors.

ART 290 - Basic Art Media and Techniques (3)
Introductory art-making course for non-art majors. Students learn a range of basic drawing, painting, and ceramics media and techniques through projects, sketchbooks, art critiques, and collaborative activities in an art studio atmosphere. May be repeated.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to non-art majors.

ART 291 - Basic Photography and Intermedia Art Techniques (3)
Introductory artmaking course for non-art majors emphasizing traditional, black-and-white photography and basic darkroom procedures and techniques applied to making creative and original images that realize the potential of photography as a fine arts medium. This course can be repeated.
A total of 9 credits may be earned.
Open only to non-art majors and studio art minors.

ART 292 - Experimental Moving Image for Non-Majors (3)
Video and Intermedia art-making course for non-art majors. Students will be introduced to a range of basic camera, sound, and digital video editing to create short moving image artworks, through technical workshops, screenings, art critiques and other collaborative activities in an art studio atmosphere. This course may be repeated.
A total of 9 credits may be earned.
Open only to non-art majors.

ART 299X - Experimental/Developmental Topics (0 TO 6)
Topics relevant to the discipline. Course titles to be announced before each semester.
A total of 6 credits may be earned.

ART 300 - Art Workshop (1 TO 3)
A hands-on workshop experience to focus on the development of specialized skills and techniques that apply to the studio areas of photography, animation, and electronic art. Specific content will be announced before each offering. A particular topic can only be taken once.
Prerequisite: to be announced before each offering. A total of 3 credits may be earned.
Open only to School of Art majors and minors.

ART 301 - Digital Fabrication (3)
Topical expansion on the use of digital technology in the fine arts such as digital imaging, motion graphics, digital video editing, and computer animation. Specific content will be announced before each offering.
Prerequisite: ADS 102 or CAP 102; AFA 202; ART 200.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

ART 310 - Animation: Drawing for Animators (3)
Introduces volume and 2-axis perceptions facilitated by timeline creation and playback. Focuses on life drawing, animation, and body mechanics.
Prerequisite: ART 211.
Parallel: ART 311.
Open only to animation majors.

ART 311 - Animation: 3D Modeling, Texturing, Lighting, and Rendering (3)
Intermediate study of 3D computer animation. Topics will include modeling, animation, surfaces, lighting, and rendering.
Prerequisite: ART 210.
Open only to Animation majors.

ART 312 - Animation: 3D Animation, Rigging, and Simulation (3)
Intermediate study of 3D computer animation. Topics will include animation, rigging, and simulation.
Prerequisite: ART 311.
Open only to Animation majors.

ART 313 - Animation: Specialty (3)
Advanced study of 3D computer animation. Students will begin to focus on a specialty in the commercial field of animation. Topics may include modeling, texturing, rendering, character animation, rigging, and simulation.
Prerequisite: ART 312.
Open only to Animation majors.

ART 314 - Animation: Experimental Techniques (3)
Experimental animation is a course designed to break down preconceived ideas about animation. In this course, students will explore unconventional animation methods using different types of media to convey a story, idea, or theme.
Prerequisite: ART 312 and 316.
Open only to Animation majors.

ART 315 - Animation: Character Design (3)
Focuses on visual character development from descriptions, scripts, reference, or biographies. Includes research, observation, experimentation, and construction.
Prerequisite: ART 211.
Open only to Animation majors.

ART 316 - Animation: Storyboarding (3)
Explores large-scale narrative, entertainment, and explanation as a way to eliminate interior ideas and logistics problems in storyboarding.
Prerequisite: ART 315.
Open only to Animation majors.

ART 322 - Intermedia: Space and Time (3)
Expands upon concepts, aesthetics, and techniques of video and time-based electronic art. Topics include digital video, interactive media, sound, installation and experimental time-based genres. Work and readings by electronic and intermedia artists will be screened and discussed.
Prerequisite: ART 321.
Open only to School of Art majors and minors.

ART 323 - Intermedia: Special Topics (3)
Emphasizes the advanced of specialized topics within video and intermedia art. Continues the development of new techniques and concepts.
Prerequisite: ART 322.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

ART 330 - Photography: Color (3)
Introduction to color printing and processing. Principles, techniques, and nuances of color photography are covered with emphasis on their fine art applications. Cameras with adjustable f-stops, shutter-speeds, and focus are necessary.
Prerequisite: ART 232.
Open only to School of Art majors and minors.

ART 331 - Photography: Lighting Equipment and Techniques (3)
Introduction to lighting systems, including: LED, Tungsten and Flash equipment. Both studio and location techniques will be explored through creative projects.
Prerequisite: ART 232 or 233 or 330 or by permission of the professor.
Open only to School of Art majors and minors.

ART 332 - Photography: Special Topics (3)
Investigation of a particular topic, problem, or issues in photography (alternative processes, performance, installation, mural printing, etc.). Specific content will be announced before offering. A particular topic can only be taken once.
Prerequisite: ART 232 and 233.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to School of Art majors and minors.

ART 333 - Photography: Fine Art Digital Imaging 2 (3)
Course continues technical and conceptual themes from ART 233 as they relate to the manipulation of fine art images within the digital environment, focusing on advanced processes and self-directed projects.
Prerequisite: ART 233.
Open only to School of Art photography/intermedia majors.

ART 369 - School of Art Internship (3)
Ten or more weeks of supervised summer work-related experience. A selective review process must be passed before enrolling. Paid professional experience under supervision of department and professional sponsors.
Prerequisite: portfolio review by area faculty, overall grade-point average of 2.75, junior standing; permission of the director of the school.
Open only to art majors.

ART 370 - Art Immersive Project (1 TO 6)
An interdisciplinary student-driven immersive art project that is guided by a faculty mentor. Prerequisite: permission of the instructor.
A total of 12 credits may be earned, but no more than 6 in any one semester or term.

ART 411 - Animation: Pre-Production (3)
Introduces a variety of artistic development solutions to facilitate large-scale project creation. Focuses on problem solving, research, organization, digital printing, and workflow.
Prerequisite: ART 316.
Open only to Animation majors.

ART 412 - Animation: Compositing and Motion Graphics (3)
Teaches several different approaches to animation covering the integration of CGI, digital effect techniques, and establishing motion graphics fundamentals for animation and video production.
Prerequisite: ART 313.
Open only to Animation majors.

ART 413 - Animation: Special Topics (3 TO 9)
Intensive investigation of a particular topic, problem, or project in animation. Specific content will be announced before offering. A particular topic can only be taken once.
Prerequisite: ART 311.
A total of 9 credits may be earned.
Open only to animation majors.
ART 414 - Animation: Production (3)
Design and production of a collaborative animation project. Projects will be produced in collaboration with an interdisciplinary group of artists, animators, or composers.
Prerequisite: ART 411.
Open only to Animation majors.

ART 415 - Animation: Independent Study (1 TO 3)
Advanced independent exploration of topics in photography, animation, video, or intermedia art.
Prerequisite: sponsorship by a faculty member and permission of the director of the school.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to art majors.

ART 416 - Animation: Apprentice (1 TO 3)
This course provides an opportunity for an undergraduate student to work as an apprentice for either a professional animator, faculty member, or Master of Fine Arts graduate student on an approved animation project.
Prerequisite: sponsorship by a faculty member and permission of the director of the school.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to animation majors.

ART 424 - Intermedia: Advanced Problems (3)
The development of a body of work refining approaches to video and intermedia art. Projects can be collaborative and interdisciplinary or independently produced. All work will be produced in consultation with the instructor. External exhibition opportunities will be explored.
Prerequisite: ART 323.
Open only to art majors.

ART 433 - Photography: Directions (3)
Major emphasis on the development of the individual aesthetic. Addresses artistic direction, motivations, discipline, craft, critical abilities, and articulation of ideas. Photographic media to be used is at the discretion of the student.
Prerequisite: ART 233, 331; completion of 15 credits in photography.
Open only to art majors.

ART 434 - Photography: Advanced Directions (3)
A continuation of ART 433; emphasis on the further maturation of artistic abilities and intellect. Preparation for senior exhibition and post-graduation issues will be addressed.
Prerequisite: ART 433. A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to art majors.

ART 480 - Senior Project in Photography and Intermedia Art (3)
Synthesis of undergraduate studio experiences in photography, video, and intermedia art culminating with a student exhibition.
Prerequisite: completion of 24 credits in photography and intermedia art, sponsorship by an art faculty member; permission of the director of the school.
Parallel: ART 434 for photography option.
Open only to art majors.

ART 490 - Animation: Senior Project (3)
Synthesis and culmination of undergraduate studio experiences in animation with a student exhibition as the capstone experience.
Prerequisite: ART 411, 414; completion of 27 credits in animation, sponsorship by an art faculty member; permission of the director of the school.
Open only to animation majors.

ART 498 - Seminar in Art (3)
Group or individual investigation and experiences in photography, animation, video, or intermedia art.
Prerequisite: completion of 30 credits in art; permission of the director of the school.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.
Open only to art majors.

ASIA - ASIAN STUDIES
ASIA 400 - Study Abroad (3 TO 9)
Study of an intermediate or advanced Asian language(s), literature, and culture(s) in a foreign country where students are immersed within the Asian culture. May include seminars arranged during travel.
Prerequisite: permission of the program director.
A total of 9 credits may be earned.

ASTR - ASTRONOMY
ASTR 100 - Introductory Astronomy: A Study of the Solar System and Beyond (3)
Study of the physical nature of objects in the universe and methods used by astronomers to understand them. Topics selected from basic laws of nature, the solar system, stars, nebulae, galaxies, and cosmology. Core Transfer Library: Physical Sciences (IPS 1710)
ASTR 101 - Astronomy Materials for the Teacher (3)
Fundamentals of astronomy including historical aspects and modern astronomy concepts. Emphasizes construction of models and experimentation appropriate to the classroom. Designed primarily for students in education programs.

ASTR 120 - The Sun and Stars (3)
Introduction to the science underlying modern stellar astronomy. Topics include history of astronomy, practical astronomy, naked-eye cosmology, gravity and orbital motion, light and matter and properties of the sun and stars. Observational and experimental data are used to reveal natural physical laws which provide information about remote objects in space.
Prerequisite: at least two years of high school algebra.

ASTR 121 - Honors Astronomy Laboratory (1)
Introduction to observational stellar astronomy. The student will plan and execute sessions in the Ball State University Observatory and analyze and interpret astronomical data related to the determination of the properties of stars.
Prerequisite: permission of the instructor.
Prerequisite or parallel: ASTR 120.

ASTR 122 - Stellar Evolution, Galaxies, and Cosmology (3)
Continuation of ASTR 120. Topics include stellar evolution, the Milky Way Galaxy, galaxies, quasars, active galactic nuclei, supermassive black holes, large scale structure of the universe and cosmology.
Prerequisite: ASTR 120.
Not open to students who have credit in ASTR 332.

ASTR 124 - The Solar System (3)
Introduction to the scientific study of our Solar System and Earth as a planet. Topics include scientific methodologies, object classification, planetary environments and components, formation and evolution of the Solar System, space science, space exploration, and the search for life in the Solar System.

ASTR 126 - Black Holes, Dark Matter, and the Universe (3)
A journey into the life and death of stars, their remnants, such as black holes, the formation of galaxies, and the large scale structure of the universe, and the exploration of dark matter and cosmology.

ASTR 200 - Topics in Astronomy (1 TO 3)
Discussion of specific topics in astronomy, such as comets, eclipses, UFOs, and interstellar travel. Designed for students not majoring in physics, the course requires no math or science background. Students may consult their curricular advisors or the Department of Physics and Astronomy for specific topics being studied during a given semester.
A total of 3 credits may be earned.

ASTR 302 - Observational Astronomy (3)
Introduction to observational astronomy. Topics include night sky observing skills, celestial coordinate and time systems, planning astronomical observing sessions, astronomical telescopes and instruments, basic digital imaging, image processing and analysis. Designed for astronomy educators and amateur astronomers.
Prerequisite: ASTR 120.

ASTR 330 - Astronomy and Astrophysics 1 (4)
A review of mechanics, electromagnetic radiation, and atomic structure in the context of modern observational astrophysics. Solar system astrophysics—including an introduction to celestial mechanics and astronomical coordinate and time systems—are surveyed, and astronomical instruments are discussed.
Prerequisite: PHYC 120, 122.

ASTR 332 - Astronomy and Astrophysics 2 (4)
An examination of observational stellar astronomy with applications to the study of stellar structure and evolution, and a review of the physics of stellar systems such as star clusters, galaxies, and clusters of galaxies.
Prerequisite: ASTR 330.

ASTR 380 - Topics in Modern Astronomy (2)
Covering selected topics in contemporary astronomy. Extensive use of library facilities including current journals and periodicals in astronomy. Discussions of current astronomical research.
Prerequisite: permission of the instructor.
A total of 4 credits may be earned, but no more than 2 in any one semester or term.

ASTR 382 - Instruments and Techniques in Planetarium Operations (3)
Use of planetarium instruments, console, and chamber. Creation and presentation of planetarium programs including slide-duplicating techniques, slide opaquing, and the production of sound tracks.
Prerequisite: permission of the planetarium director.
ASTR 386 - Advanced Observational Astronomy (3)
The development of methods used to compute stellar positions, distances, motions, temperatures, and luminosities will be reviewed and applied. Astronomical instruments, in the context of their use in observational astronomy, will be discussed and used. The topics of astronomical astrometry, photometry, and spectroscopy along with image acquisition and processing of CCD images will be discussed.
Prerequisite: ASTR 332.

AT - ATHLETIC TRAINING

AT 196 - Introduction to Athletic Training (2)
Introduction to the profession of athletic training. Daily responsibilities and occupational opportunities for the athletic trainer are discussed. Laboratory experiences include basic skills needed for a beginning athletic training student. A requirement for application to the Athletic Training Education program. Lab fee required.

AT 250 - Application of Taping, Wrapping, and Protective Devices in Athletic Training (1)
A laboratory course designed to facilitate learning of the knowledge and skills required to effectively tape, wrap, or apply any protective devices to a patient in an athletic training setting.
Prerequisite: AT 196.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 260 - Clinical Education in Athletic Training 1 (2)
Guided experiences in athletic training, which includes the application of knowledge and skills in the following domains: prevention; clinical evaluation and diagnosis; immediate care, treatment, rehabilitation, and reconditioning; organization and administration; and professional responsibilities.
Prerequisite: AQUA 260 and AT 196 and ANAT 201.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 261 - Clinical Education in Athletic Training 2 (2)
Guided experiences in athletic training, which includes the application of knowledge and skills in the following domains: prevention; clinical evaluation and diagnosis; immediate care, treatment, rehabilitation, and reconditioning; organization and administration; and professional responsibilities.
Prerequisite: AT 260.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 360 - Clinical Education in Athletic Training 3 (2)
Guided experiences in athletic training, which includes the application of knowledge and skills in the following domains: prevention, clinical evaluation and diagnosis, immediate care, treatment, rehabilitation, and reconditioning, organization and administration, and professional responsibilities.
Prerequisite: AT 260 and 261 and 370 and 371.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 361 - Clinical Education in Athletic Training 4 (2)
Guided experiences in athletic training, which includes the application of knowledge and skills in the following domains: prevention, clinical evaluation and diagnosis, immediate care, treatment, rehabilitation, and reconditioning, organization and administration, and professional responsibilities.
Prerequisite: AT 260 and 261 and 360 and 370 and 371.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 370 - Lower Extremity Orthopedic Evaluation in Athletic Training (3)
Procedures and techniques for the recognition and evaluation of orthopedic injuries and conditions that occur to the lower extremities will be discussed. Laboratory experiences will emphasize the proper methods and techniques in evaluating lower extremity pathologies.
Prerequisite: ANAT 201.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 371 - Upper Extremity Orthopedic Evaluation in Athletic Training (3)
Procedures and techniques for the recognition and evaluation of orthopedic injuries and conditions that occur to the upper extremities will be discussed. Laboratory experiences will emphasize the proper methods and techniques in evaluating upper extremity pathologies.
Prerequisite: ANAT 201.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 372 - Therapeutic Modalities in Athletic Training (3)
Examination of the treatment of musculoskeletal injuries and conditions through the use of cryotherapy, thermotherapy, electrotherapy, and other modalities found in the sports medicine setting. Laboratory experiences emphasize the clinical skills associated with the application of therapeutic modalities. Lab fee required.
Prerequisite: AT 370, 371.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 373 - Therapeutic Exercise and Techniques in Athletic Training (3)
Examination of the comprehensive rehabilitation of musculoskeletal injuries and conditions using therapeutic exercise and manual therapy techniques. Laboratory experiences emphasize the application of rehabilitation principles for treatment of common musculoskeletal injuries/conditions. Lab fee required.
Prerequisite: AT 370, 371.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 374 - Organization and Administration of Athletic Training (3)
Understanding of risk management, healthcare delivery mechanisms, insurance, reimbursement, documentation, patient privacy, and facility management as it relates to athletic trainers functioning within the context of a complex healthcare system.
Prerequisite: AT 370 and 371 and 372.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 460 - Clinical Education in Athletic Training 5 (2)
Guided experiences in athletic training, which includes the application of knowledge and skills in the following domains: prevention, clinical evaluation and diagnosis, immediate care, treatment, rehabilitation, and reconditioning, organization and administration, and professional responsibilities.
Prerequisite: AT 260 and 261 and 360 and 361 and 370 and 371 and 372 and 373.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 461 - Clinical Education in Athletic Training 6 (2)
Guided experiences in athletic training, which includes the application of knowledge and skills in the following domains: prevention, clinical evaluation and diagnosis, immediate care, treatment, rehabilitation, and reconditioning, organization and administration, and professional responsibilities.
Prerequisite: AT 260 and 261 and 360 and 361 and 370 and 371 and 372 and 373 and 460.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 477 - Psychosocial Aspects of Sports Medicine (3)
Presents a variety of psychological and sociological factors related to working with patients and athletes in exercise and sports settings, including recognition of abnormal social, emotional, and mental behaviors as well as the ability to intervene and refer these individuals as necessary.
Parallel: AT 373.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 494 - Clinical Integration in Athletic Training (1)
A laboratory course designed to facilitate the integration of knowledge, skill, and clinical decision making into simulated patient care experiences using the principles associated with evidence-based practice.
Prerequisite: AT 370 and 371 and 372 and 373 and 374.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 495 - Medical and Pharmacological Aspects of Athletic Training (4)
Develops the medical and pharmacological knowledge and clinical skills that athletic trainers must possess to diagnose, treat, and refer patients with general medical illness/injuries. Laboratory experiences focus on the application of medical and pharmacological knowledge and the clinical skills used to diagnose, treat, and refer patients with medical illness/injuries.
Prerequisite: AT 370 and 371 and 372 and 373.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 496 - Clinical Experience in Athletic Training (1 TO 6)
Guided experiences in athletic training, which includes the application of knowledge and skills in one or more of the following domains: prevention, clinical evaluation and diagnosis, immediate care, treatment, rehabilitation, and reconditioning, organization and administration, and professional responsibilities.
Prerequisite: permission of the instructor.
A total of 6 credits may be earned.
Open only to athletic training majors admitted into the Athletic Training Program.

AT 497 - Clinical Decision Making in Athletic Training (2)
Capstone course for the advanced athletic training student. Current topics in sports medicine, athletic training research, and professional responsibilities are investigated.
to develop clinical decision-making skills based on sound evidence.
Prerequisite: AT 370 and 371 and 372 and 373.
Open only to athletic training majors admitted into the Athletic Training Program.

**BA - BA – BUSINESS ANALYTICS**

**BA 305 - Introduction to Business Analytics (3)**
Introduction to data-driven business management analytics. Provides the business rationale for leveraging analytics to improve organizational performance and the challenges businesses face on analytics. Introduces the basis of data science and business analytics for handling massive databases. Covers concepts such as ethical use of data, data mining, data management, the use of key performance indicators, dashboards and scorecards for performance management, text and web mining, and big data analytics.
Prerequisite: ECON 221 or equivalent with a grade higher than C- or permission of the department chairperson.

**BA 310 - Data Visualization for Business Analytics (3)**
Introduces students to data visualization for business analytics and intelligence, and includes both the principles and techniques of creating insightful visualizations. Students will learn the value of visualization, specific techniques in information visualization and scientific visualization, and understand how to best leverage visualization methods.
Prerequisite: ISOM 210 or permission of the department chairperson.

**BA 345 - Data Mining for Business Analytics (3)**
Designed to facilitate the understanding of how to leverage business intelligence and analytics in their organization. Examines critical areas of analytics such as text analytics, descriptive analytics, predictive analytics, and prescriptive analytics. Students learn how to apply logistic regression, association rules, tree structured classification and regression, cluster analysis, discriminant analysis, and neural networks to address critical business issues and enable/drive businesses to transform their organizations.
Prerequisite or parallel: BA 305.

**BA 436 - Data Warehouse and Business Intelligence (3)**
Introduces the topics of how to collect, manage, mine, analyze, and interpret large amounts of structured data, while creating visual representations of this information using industry tools and technologies. Includes dimension modeling, database requirements, data management processes within a data warehouse. Students will create data-driven proposals based on case studies and build dashboards to help with executive decision support.
Prerequisite or parallel: BA 305.

**BA 482 - Business Analytics Research (Capstone Course) (3)**
Students will apply the skills or techniques learned in previous courses (e.g., data mining, visualization, data analysis, etc.) to conduct a research study driven by real-world enterprise data or data they collect on their own. The research project aims at evaluating the students on one or more of the following skills: ability to conduct research and learn as team members and independently; teamwork and communication; business analytics projects life cycle; collecting; processing, and analyzing structured and unstructured data; developing and testing predictive analytics models; developing and testing hypothesis-driven research questions; writing scientific/professional reports.
Prerequisite or parallel: BA 345.

**BED - BUSINESS EDUCATION**

**BED 382 - Improvement of Instruction in Marketing Subjects (3)**
Teaching strategies, instructional materials, and lesson and unit planning for the person with a baccalaureate degree in a discipline other than marketing education who is seeking licensure as a marketing education teacher/coordinator.
Prerequisite: EDSE 380 or equivalent; full admission to the university.
Open only to students seeking marketing education certification.

**BED 383 - Curriculum and Methods for Teaching Computer Applications and Careers (3)**
The role of business education in the middle and secondary school curricula; objectives, planning, methods, techniques, and materials for teaching computer applications and careers in middle and secondary schools.
Prerequisite: ISOM 112; minimum grade of C in ISOM 125.

**BED 384 - Methods of Teaching: Basic Business, Marketing and Accounting (3)**
Objectives, planning, methods techniques, and materials for teaching basic business, marketing, and accounting in middle and secondary schools.
Prerequisite: ACC 202; MKG 300.
Parallel: EDJH 385; EDSE 380.
BED 387 - Teaching Business in Middle and Secondary School (3)
Curriculum, objectives, planning, and methods for teaching business courses in middle and secondary schools. Emphasis on curriculum development, lesson and unit planning, classroom management, evaluation, instructional materials, and teaching strategies. Prerequisite: ACC 201, ECON 201, and ISOM 125 with a minimum grade of C; EDPS 251. Parallel: EDJH 385; EDSE 380.

BED 392 - Managing In-School Laboratory and Cooperative Business/Marketing Programs (3)
Special techniques and knowledge needed for managing in-school laboratory and business, career and technical, marketing, and interdisciplinary cooperative education programs. Restricted to persons seeking licensing as teachers or coordinators of career/technical business education, marketing education, career and technical education. Prerequisite: an undergraduate methods course in business education, marketing education, or permission of the department chairperson.

BED 393 - Philosophy, Organization, and Administration of CTE (3)
The principles upon which career/technical education is organized, administered, and supervised; federal and state regulations; agencies that provide delivery systems for career/technical education; vocational rehabilitation; and programs for persons with special needs. Prerequisite: an undergraduate methods course in business education, marketing education, or permission of the department chairperson.

BED 496 - Principles and Philosophy of Marketing Education (2)
An investigation of the current status, historical development, philosophy, and principles of marketing education. Components include secondary, post-secondary, and adult marketing education, DECA, and general and specialized curricula. Prerequisite: EDSE 380.

BED 497 - Independent Study: Business or Marketing Education Business Information Technology (1 TO 6)
For students with excellent academic records who wish to conduct in-depth studies in some phase of business education, marketing education, or business information technology. The project selected, methods, and credits must be approved by the department chairperson and supervising faculty member. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

BIO - BIOLOGY

BIO 100 - Biology for a Modern Society (3)
Considers biological issues related to the environment, genetics and biotechnology, human reproduction and development, and population biology. Historical, contemporary, and future implications of these issues are discussed. Core Transfer Library: Life Sciences (ILS 1503) Not open to students who have credit in BIO 102, 111, or 112.

BIO 102 - Biological Concepts for Teachers (3)
Principles of biology as they relate to energy requirements and reproductive processes of living organisms, including the study of plants and conservation with emphasis on the human role in the environment. Designed primarily for students in elementary education programs.

BIO 111 - Principles of Biology 1 (4)
Designed for biology, allied health, and other science majors. Emphasis at cellular level: chemical and physical organization of life, prokaryotic and eukaryotic cell structure and function, bioenergetics, cell division, genetics, gene expression, protein synthesis, and evolution. Lecture and laboratory. Core Transfer Library: Life Sciences (ILS 1501) Prerequisite: one year of high school chemistry, one semester of college chemistry, or the equivalent.

BIO 112 - Principles of Biology 2 (4)
Examines the diversity, evolutionary relationships, ecology, and physiology of organisms in the animal kingdom with an introduction to the protozoans. Emphasizes structure and function at the organismal level, classification, and phylogenetic relationships. Lecture and laboratory. Core Transfer Library: Life Sciences (ILS 1502)

BIO 113 - Microbiology for the Health Sciences (5)
Introductory course for students in applied health curricula. Presents biomolecules of life, enzyme interaction, physiology and structure of representative microorganisms. Emphasizes bacteria, viruses, fungi, and protozoa of health significance and the host-parasite relationship. Microbiological techniques will be emphasized in laboratory. Core Transfer Library: Life Sciences (ILS 1505)
BIO 210 - Introduction to Botany (3)
Examines evolutionary solutions to problems of survival and reproduction faced by plants and their allies (plants, fungi, protists). Problems are investigated from a structure-function basis in an evolutionary-phylogenic survey. Physiological processes are emphasized, including the selective pressures involved in the evolution of these mechanisms. Lecture and laboratory.
Prerequisite: BIO 112.
Prerequisite recommended: BIO 111.

BIO 214 - Genetics (4)
Basic principles of heredity and variation emphasizing meiosis, Mendelian inheritance and probability considerations, sex and gene transmission and expression, linkage and crossing-over, the nature of the hereditary material, gene action, and genetic control of development.
Prerequisite: BIO 111, 112.

BIO 215 - Cell Biology (3)
An introduction to the biology of the cell, including cell differentiation and growth, the nature of the organization of the cell, basic bioenergetics and enzyme function, cell environment, membrane structure and function, cell metabolism, and the work performed by cells. Practical approaches to experimental design will be emphasized.
Prerequisite: BIO 111 and 112.

BIO 216 - Ecology (3)
Effects of physical and biotic conditions on the distribution, abundance, and diversity of plants and animals. Dynamics of ecological systems at population, community, ecosystem, landscape, and global levels, and from an evolutionary perspective. Practical applications of ecological knowledge to environmental problems.
Prerequisite: BIO 112.

BIO 220 - Ecological Issues in the 21st Century (3)
Fundamental concepts of ecology, including interactions between organisms and their environment, population/community dynamics, and structure/function of ecosystems. Application of concepts to current ecological issues (e.g., species extinction, human population dynamics, human food production systems, natural resource depletion, and global environmental change). Intended for non-biology majors.
Not open to students who have credit in BIO 216.
Open only to non-biology majors.

BIO 254 - Biology in the Social Context (3)
Designed to foster understanding of the interactions between and among human biological and social systems.

Emphasizes biological concepts as they relate to health and behavior.
Prerequisite recommended: college level introductory biology.
Open only to social work or family and consumer sciences majors, or by permission of the department chairperson.

BIO 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced each semester.
A total of 6 credits may be earned.

BIO 313 - Microbiology (4)
Microorganisms including representative archaea, bacteria, viruses, viroids, prions, protozoa, algae, lichens, and fungi. Emphasizes morphology, physiology, genetics, and control. Some consideration of applied microbiology and biotechnology. Lecture and laboratory.
Prerequisite: BIO 111.

BIO 315 - Methods in Cell Biology (2)
Introduction to scientific study design, experimental protocols, data analysis, and the scientific method as applied to cell biology research. Focuses on a laboratory research project that culminates in a written report and oral presentation.
Prerequisite or parallel: BIO 215.

BIO 316 - Methods in Ecology (2)
Introduction to scientific study designs, measurements, data analysis, and the logic of inference as applied to ecological research. Focuses on a field research project that culminates in a written report and an oral presentation.
Prerequisite or parallel: BIO 216.

BIO 341 - Pathogenic Bacteriology (3)
Study of pathogenic bacteria with emphasis on morphology and physiology. Laboratory techniques for culturing, isolating, and identifying bacteria.
Prerequisite: BIO 113 or 313.

BIO 369 - Internship in Biology (1 TO 6)
Paid, supervised field and laboratory experiences in public or private agencies (or in the Department of Biology). Training involves application of biological principles in the work environment.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.
**BIO 390 - Honors Colloquium in Biology (1 TO 2)**
Exploration of selected issues in biology with emphasis upon individual projects, study, and discussion.
A total of 2 credits may be earned.
Open only to honors students except by permission of the department chairperson.

**BIO 394 - Practicum in Biology (1 TO 3)**
Practical application of biology in a variety of situations including biology instruction as undergraduate teaching assistants and discussion leaders, and practical experience in government or industrial laboratories and field stations.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

**BIO 401 - Developments in Modern Biology (3 TO 6)**
Stresses recent discoveries in biology and integrates and enhances understanding of the basic principles of the discipline.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

**BIO 416 - Population Ecology (3)**
Presents fundamental principles of population growth and regulation, including both within-species and between-species interactions. Implications for over-population, endangered species, and pest and game management are discussed. Laboratory includes both experimental studies and computer simulation exercises.
Prerequisite: BIO 216.

**BIO 418 - Community and Ecosystem Ecology (3)**
Principles of ecological organization at the community and ecosystems levels. Emphasizes the processes that influence the structure and function of communities and ecosystems. Laboratory includes field and lab studies of plant and animal systems.
Prerequisite: BIO 216.

**BIO 419 - Biogeography (3)**
Understanding of principles of biogeography including plant and animal distributions.
Prerequisite: BIO 111 and 112 or permission of the department chairperson.

**BIO 420 - Field Biology of Distant Areas (3 TO 12)**
Includes study of the sciences peculiar to selected geographic areas. Ecology, flora, and fauna. Travel may be by air. Seminars may be scheduled regularly throughout the course. Registration fee may include travel charges as well as the general fee.
Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned.

**BIO 440 - Evolution (3)**
Principles, evidence, and the historical context of modern evolution theory. Some attention will be given to the origin of life and the evolution of plants and animals.
Prerequisite: BIO 111 or permission of the instructor.

**BIO 444 - Immunology (4)**
Examination of the basic principles of the immune system (components, responses, and regulation). This course will introduce basic concepts of immunology and discuss the role of immune function on the science and health community in a manner that facilitates an understanding of the complexity of the field and the role of the immune system in infection and disease. Emphasis will be placed on human and murine immune systems.
Prerequisite: BIO 215 or 313.

**BIO 446 - Applied Microbiology (3)**
The study of microorganisms that are beneficial or detrimental to changes in foods (including milk and milk products) and industrial fermentations. This is a lecture and laboratory course.
Prerequisite: BIO 313 or permission of the department chairperson.

**BIO 448 - Biometry (3)**
Principles and applications of statistics to biological problems. The use of parametric and nonparametric tests of significance in the analysis of data and the interpretation of experiments.

**BIO 452 - Advanced Genetics (3)**
Bacterial and eukaryotic genetics with emphasis on recent developments in molecular genetics. Topics include alternative structures of DNA, mechanisms of DNA replication, mutagenesis, DNA rearrangements, regulation of gene expression, RNA processing, and molecular and mutagenetic analysis of cell cycle.
Prerequisite: BIO 214; CHEM 231.
Prerequisite recommended: BIO 215.

**BIO 453 - Human Genetics and the Problems of Humanity (3)**
BIO 454 - Development and Evolution of Genomes: Genomics and Proteomics (3)
Analyses of the development, expression, and evolution of genomes through the examination of genomics and proteomics. Attempts to explore the theoretical basis of developing technologies to provide models for application to current questions in biological systems from the cellular or organismal levels by treatment of the genome as a system.
Prerequisite: BIO 214, 215; or permission of the instructor.

BIO 456 - Cancer Biology (3)
Examination of the biological basis of cancer, discussion of related contemporary issues, and overview of recent advances in cancer research. Emphasizes cancer progression, tumor production, etiology/epidemiology, prevention, modern therapies, and patient management.
Prerequisite: BIO 215 or permission of the instructor.

BIO 457 - Molecular Biology (4)
Structure and function of macromolecules in living things. Emphasizes three-dimensional structures; models for enzyme mechanisms; DNA replication; protein synthesis and membrane function; and applications of biotechnology.
Prerequisite: BIO 215 or permission of the department chairperson.

BIO 460 - Introduction to Methods of Biological Imaging (4)
Biological imaging refers to any imaging technique used in biology. However, its use in microscopy to create images of objects or features too small to be detectable by the naked human eye is paramount. The theory, design, operation, and specimen preparation for the confocal light microscope and both the transmission and scanning electron microscopes. Basic digital image manipulation is also covered. To be successful in the course, you must demonstrate competency on all three microscopes, develop a portfolio with high quality images for each type of microscopy, and complete an individual research project. Primarily designed for students interested in doing research in biology, biochemistry, or neuroscience.
Prerequisite: permission of the instructor.
Prerequisite recommended: cell biology and introductory physics.

BIO 470 - Developmental Biology (4)
Recent advances and theories in early embryogenesis and developmental biology. Major emphasis on genetic and molecular mechanisms operating during developmental phenomena. Topics include fertilization, mosaic versus regulative development, regulation of gene expression, patterning, germ line and sex determination, and neoplasia.
Prerequisite: BIO 215 or permission of the department chairperson.

BIO 480 - Limnology (3)
The physical, chemical, and biological characteristics of inland waters. Laboratory and several field trips will be devoted to exploring techniques for the evaluation of representative aquatic ecosystems.
Prerequisite: BIO 216 or permission of the department chairperson.

BIO 482 - Aquatic Microbiology (3)
Microorganisms indigenous to nonpolluted and polluted aquatic ecosystems. Emphasizes nutrient cycling and use of microorganisms as indicators of pollution. Morphology, physiology, and ecology of specific organisms. Lecture and laboratory.
Prerequisite: BIO 313.

BIO 483 - Marine Biology (3)

BIO 492 - Bioethical Decision Making (3)
Development of decision-making skills through the analysis and personal resolution of bioethical problems created by the application of new biological and biomedical knowledge and technologies.
Prerequisite: junior standing and completion of the University Core Curriculum natural sciences component or permission of the department chairperson.

BIO 498 - Undergraduate Research (1 TO 3)
Designed to give undergraduate biology students with special aptitude an opportunity to participate in scientific investigation.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.
BIO 499 - Biology Undergraduate Symposium (1)  
Prepares students for further studies or employment in the profession by developing a career plan, examining professional ethics, and establishing a professional identity. Evaluates student proficiency in the biological sciences. Offered credit/no credit only.  
Prerequisite: BIO 111 and 112 and 210 and 214 and 215 and 216 and 315 or 316.

BIOT - BIOTECHNOLOGY  
BIOT 490 - Introduction to Recombinant DNA and RNA Techniques (3)  
Study of the fundamental methods and approaches used in biotechnology with experiences in recombinant DNA and RNA techniques. Emphasis on theory and practice of commonly used scientific techniques, experimental design, and reading and analysis of scientific literature.  
Prerequisite: BIO 215.

BIOT 491 - Theory and Applications of the Polymerase Chain Reaction (3)  
Study of the theory of the polymerase chain reaction and its standard applications in research. Emphasis on experimental design and optimization of reactions, applications in DNA and RNA analysis, differential display, site-directed mutagenesis, and subcloning of PCR products.  
Prerequisite: BIO 215.

BIOT 492 - Protein Isolation and Analysis (3)  
Study of the theory and application of techniques involved in protein isolation, characterization, and analysis. Emphasis on understanding principles of protein purification, laboratory experiences in protein separation, detection and analysis of structure function relationships.  
Prerequisite: BIO 215.

BIOT 493 - Professional Development in Biotechnology (1)  
Emphasizes curriculum vita development, provides employment counseling, discusses job ethics, values, and job interview strategies, and includes a presentation by each student analyzing a journal article.  
Prerequisite: BIOT 490.

BIOT 494 - Cell Culture Techniques (2)  
Study of the practice and theory of cell and tissue culture. Emphasis on the application of basic concepts and techniques to the in vitro culture of many different cell types.  
Prerequisite: BIOT 490.

BIOT 495 - DNA Sequencing and Bioinformatics (2)  
Covers the determination of DNA nucleotide sequence and Internet/software utilization of DNA and protein databases for sequence analysis.  
Prerequisite: BIOT 490.

BIOT 496 - Research Design and Presentation (2)  
Emphasizes improvements in oral and written communication skills and development, and presentation of an independent research proposal.  
Prerequisite: BIOT 490.

BL - BUSINESS LAW  
BL 260 - Principles of Business Law (3)  
The nature, role, structure, and historical development of the legal system. The essential elements of legal liability, contracts, and government regulation of business. Law, ethics, and commercial relations that constitute the legal environment of business.

BL 363 - Uniform Commercial Code Law (3)  
Principal articles of the code including sales, commercial paper, and security interests, in addition to creditors' rights and property law. Includes state and federal consumer protection laws as they affect commercial law.  
Prerequisite: BL 260.

BL 367 - Principles of Estate Planning (3)  
An introduction to problems associated with planning of financial resources during working life, retirement, and after the death of the principal income producer. Included are techniques for fact gathering, tax principles, use of trusts, and will drafting.  
Prerequisite: BL 260.

BL 497 - Independent Study in Business Law (1 TO 6)  
An opportunity for students with superior scholastic records to study some special phase of business law. The topic selected, methods of study, and credits allowed must be approved by the department chairperson.  
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

BOT - BOTANY  
BOT 380 - Forestry (3)  
General course in forestry with emphasis on forest policy, ecology, and management. Current issues are discussed with particular reference to their social, political, and environmental implications. Lecture and laboratory.
BOT 440 - Taxonomy of Vascular Plants (4)
Identification, use, and care of native and ornamental trees, shrubs, vines, and herbaceous plant material. The use of botanical keys, manuals, and texts in the identification of the plant taxa.
Prerequisite: BIO 210 or permission of the instructor.

BOT 442 - Economic Botany (3)
The cultivation, processing, environmental requirements, and use of plants and plant derivatives for food, drugs, dwellings, clothing, and power.

BOT 446 - Medical Mycology (3)
Study of fungi with emphasis on pathogenic forms. Discusses methods for identification of fungi along with morphology and biochemistry of fungi.
Prerequisite: BIO 313.

BOT 451 - Plant Physiology (4)
An introductory treatment of the physiological activities of green plants with emphasis on plant growth substances, photosynthesis, and intermediate metabolism.
Prerequisite: BIO 111 or 210.

BOT 470 - Dendrology (3)
The identification and site characterization of woody plants with an emphasis on midwestern tree species. Use of botanical features and keys in field identification.
Correlation of species with site conditions, plant diseases, climatic parameters, associate species, and geographical distribution.

BOT 480 - Plant Ecology (3)
Factors affecting the distribution and abundance of plants. Patterns, structure, and development of plants at the individual, population, and community level. Laboratory provides experience with ecological experimentation at the physiological, population, and community levels.
Prerequisite: BIO 216 or permission of the instructor.

BOT 481 - Aquatic Botany (4)
The collection and identification of nonvascular and vascular plants from freshwater ecosystems. Emphasizes the morphology, physiology, and ecology of these plants to explain their distribution in nature. Class project and field trips may be used to demonstrate ecological relationships.
Two Saturday field trips required.
Prerequisite: BIO 210 or permission of the instructor.

BUSA - BUSINESS ADMINISTRRTN
BUSA 101 - Introduction to Business (3)
Emphasizes the vital role of business in our society through a discussion of both the external environment of business and the internal environment of the business enterprise. Assesses the contribution of the social and behavioral sciences in the decision-making process. Core Transfer Library: Professional/Occupational (IPO 1810)
Not open to junior or senior business majors.

BUSA 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

BUSA 300 - Introduction to Sustainability in Business (3)
Offers interdisciplinary perspectives on issues forming the environmental context for business. The life-cycle concept frames the discussion of environmental management systems and standards, pollution prevention, and product and market issues. Includes lectures, readings, case studies, and student projects.
Prerequisite: sophomore standing.

BUSA 302 - Career Management: Tools, Processes, and Strategies (3)
Students will gain familiarity with methods essential to successful career management including self-assessment tools. Topics may include marketing yourself, researching/tracking employment opportunities, decision making, career services, portfolios, values in career satisfaction, generational differences, employer size/climate issues, assessing a firm's environment, and business protocol.
Prerequisite: junior standing.
Cannot be used in any Miller College of Business major or minor requirements.

BUSA 369 - Internship in Business Administration (1 TO 3)
Under a Miller College of Business approved and supervised program, business administration majors work as interns for business firms, governmental agencies, or other types of organizations. Requires reporting and/or other educational activities.
Prerequisite: permission of the department chairperson or internship coordinator.
A total of 3 credits may be earned.
Open only to business administration majors.
CANS - CANADIAN STUDIES
CANS 150 - Canada: Cultural Crossroads (3)
An interdepartmental introduction to the geography, history, government, economy, literature, art, and music defining Canada's individuality and international heritage. An examination of current issues on such topics as economic agreements, environment, education, health system, and multicultural relations.

CAP - COLL ARCH & PLANNING
CAP 101 - Environmental Design and Planning 1 (3)
Basic problem solving related to abstract and historical and contemporary problems in environmental design. Elements of space, form, function, and human use as they affect the natural and built environments.

CAP 102 - Environmental Design and Planning 2 (3)
Basic problem solving related to abstract and historical and contemporary problems in environmental design. Elements of space, form, function, and human use as they affect the natural and built environments.
Prerequisite: CAP 101.

CAP 161 - Design Communications Media 1 (2)
Methods for environmental design communications in a variety of media.

CAP 162 - Design Communications Media 2 (2)
Methods for environmental design communications in a variety of media.
Prerequisite: CAP 161.

CAP 198 - Introduction to Architecture, Landscape Architecture, and Urban Planning (3)
A two-week workshop in environmental design and planning including lectures, field trips, and hands-on studio experience. Offered credit/no credit only.
Open only to high school juniors enrolled in the College Summer Program.

CAP 200 - Design Thinking (3)
Introduction to the fundamental characteristics and practice of design thinking. Students will become aware, understand, and learn to use design methods to match people's needs with what is feasible and viable in a creative framework that challenges conventional problem-solving and/or decision-making strategies.

CAP 381 - Introduction to Computer-Aided Design 1 (3)
Introduction to two-dimensional computer-aided design using micro- and large computer CAD systems. Hardware and operating system concepts, drawing and editing commands. Emphasizes environmental design and planning applications.
Prerequisite: permission of the dean of the College of Architecture and Planning.

CAP 382 - Introduction to Computer-Aided Design 2 (3)
A continuation of CAP 381 in a three-dimensional environment. Introduction to the drawing environment, view manipulation, projections, coordinate systems, and hidden line and hidden surface shading. Emphasizes environmental design and planning applications.
Prerequisite: CAP 381; permission of dean of the College of Architecture and Planning.

CAP 400 - Community-Based Projects (1 TO 3)
Independent study in urban design, planning, landscape architecture, and architecture, offered in conjunction with the college's Community-Based Projects Program. A multidisciplinary approach to problem solving in collaboration with faculty and professional consultants.
Prerequisite: permission of the Community-Based Projects coordinator.
A total of 3 credits may be earned.

CAP 498 - Special Projects in College of Architecture and Planning (3)
Special projects in the College of Architecture and Planning undertaken by groups of students directed by faculty.
A total of 9 credits may be earned.

CC - CLASSICAL CULTURE
CC 101 - Word Origins and Vocabulary Development (3)
English vocabulary derived from Latin and Greek, emphasizing word formation as a means of expanding and enriching students' vocabularies. No knowledge of Latin or Greek is required.

CC 102 - Latin and Greek Based Bio-scientific Terminology (3)
Analysis, formation, and recognition of technical vocabulary derived from Latin and Greek commonly used in the medical and life sciences. No knowledge of Latin or Greek is required.
CC 105 - Introduction to the Classical World (3)
Main features of the civilization of the Greeks and Romans—their history, political institutions, art, literature, and philosophy. Explores through lectures, readings, and audiovisual materials the nature of the ancients' contribution to Western civilizations.

CC 201 - Cultural Life of Ancient Greece (3)
A close, interpretive view of Greek cultural values, customs, and institutions, such as individualism, ideals of beauty, social experimentation, competitiveness, and intellectual curiosity, as evidenced in primary sources.

CC 202 - Cultural Life of Ancient Rome (3)
A close, interpretive view of Roman cultural values, customs, and institutions, such as respect for tradition, rule of law, social responsibility, and technical expertise, as evidenced in primary sources.

CC 203 - The Classical World in Film (3)
Aspects of ancient civilization depicted in film (such as Roman history, Greek mythology, etc.). An examination of the accuracy of such portrayals through comparison with ancient sources. The place of such films in the history of cinema. Topics will vary.

CC 205 - Mythologies of the World (3)
Classical mythology (Greek and Roman) will represent Western tradition in a comparative study with other mythologies of the world. Emphasizes understanding mythologies as symbolic cultural systems expressing societal values.

CC 206 - Sport, Competition, and Spectacle in the Ancient World (3)
An examination of the principles of competition and love of glory and their impact on the cultural and social institutions of Greece, Rome, and other ancient Mediterranean civilizations. Special emphasis will be laid on the great games of the Greeks and Romans and the arena spectacles of the Romans. Attention will also be paid to the pressures which arise in face-to-face societies and to the rivalries which led to a culture of conquest in the Mediterranean world.

CC 301 - Classical Literature in English Translation (3 TO 6)
Selections from the major works of Greek and Roman literature and their continuing influence on Western literature. Emphasizes prose and poetry in alternate terms. A total of 6 credits may be earned.

CC 302 - Women in Antiquity (3)
The study of women in ancient Greece and Rome, based on evidence from literary and nonliterary sources. Explores the influence of social, political, and legal institutions on the status of women and on their relationships with men.

CC 304 - The Ancient City (3)
Life of the ancient city as mirrored in archaeological and literary sources. The concept of the city, its art and architecture, with special emphasis on Periclean Athens and Augustan Rome.

CC 305 - Classical Myth and Theory (3)
Major themes of classical myths: creation, the divine and human family, life of the hero, the quest, monsters, etc. Study and employment of modern theories of analysis: myth-ritual, psychological, structuralist, etc. Prerequisite recommended: CC 205.

CC 306 - Murder and Mayhem in Ancient Drama (3)
An examination of the dramatic literatures of ancient Greece, Rome, and other ancient Mediterranean cultures (tragedy, comedy, mime, etc.), studied as literary genres, as predecessors of Western drama, and as reflections of social institutions and cultures. Emphasis will be placed on developing a critical understanding of ancient dramatic texts and their uses within ancient and modern societies. Selections will vary.

CC 400 - Classical Cultures in Context (3)
Study of intermediate or advanced language(s), literature(s), and culture(s) of the ancient Mediterranean in a foreign country where students are immersed within another culture. May include seminars arranged during travel. Prerequisite: permission of the instructor.

CC 403 - Ancient Historiography (3)
Examines the origin and development of the genre of ancient history as well as the nature of ancient testimony and records. Authors include Herodotus, Thucydides, Plutarch, Livy, Tacitus, and Suetonius. Prerequisite: CC 105 and either CC 201, 202, 301, HIST 461 or 462.

CC 404 - Special Topics in Antiquity (3)
Special research topics in classical culture, including period, author and genre topics, and methods. Prerequisite: either CC 401, 403 or permission of the instructor.
CC 498 - Readings (1 TO 9)
Individualized course of reading or limited research to allow students to explore special topics in classical antiquity.
A total of 9 credits may be earned.

CCIM - COLL COMM, INFO & MEDIA
CCIM 210 - Professional Development (1)
Provides opportunities and skills needed to secure internships and jobs in communication- and media-related professions.
Not open to students who have credit in JOUR 169.
Open only to College of Communication, Information, and Media majors.

CCIM 280 - Social Media (3)
Combines the examination of social technologies through historical frameworks with the application of modern, emerging information dissemination strategies. Students will learn how to evaluate, deploy, and apply these technologies.
Open only to College of Communication, Information, and Media majors.

CFA - COLLEGE OF FINE ARTS
CFA 101 - Introduction to the Fine Arts: Art, Drama, Music, Dance (3)
Interdisciplinary course offering students experiences with visual art, dance, music, and theatre as approaches to reality. Emphasizes developing basic vocabulary and exploring a range of historical styles. Attendance at several evening performances will be required.

CFA 498 - Seminar in Museum Studies (1 TO 5)
Interdisciplinary introduction to museums and museum collections through formal lectures and independent research on various components of a planned permanent collection exhibition. Participants act as interns in museum curation, education, registration, and preparation.
Prerequisite: permission of the instructor.
A total of 9 credits may be earned, but no more than 5 in any one semester or term.

CH - CHINESE
CH 101 - Beginning Chinese 1 (4)
The first course in the Chinese language.

CH 102 - Beginning Chinese 2 (4)
The second course in the Chinese language.
Prerequisite: CH 101.

CH 201 - Intermediate Chinese 1 (4)
Designed to build on a foundation of first-year Chinese to help students achieve greater fluency in oral expression and to emphasize the reading of Chinese character texts containing both old and simplified character forms. Grammar will be taught through the use of sentence patterns, and character writing will be practiced.
Traditional and contemporary aspects of Chinese culture will also be taught.
Prerequisite: CH 102.

CH 202 - Intermediate Chinese 2 (4)
Designed to build on the foundation laid thus far in Chinese and to help students achieve greater fluency in the four basic skills of listening, speaking, reading, and writing. Students will read newspapers, short stories, and essays by modern authors with the help of a dictionary and will write short compositions in Hanzi on their readings.
Prerequisite: CH 201.

CH 301 - Advanced Chinese 1 (4)
Designed for students with credit in CH 202. Further skill development in the idiomatic use of the Chinese language and increased understanding of Chinese culture.
Prerequisite: CH 202 or two years of study in the Chinese language at the college level (or the equivalent).

CH 302 - Advanced Chinese 2 (4)
Designed for students with credit in CH 301. Enhances skills in fluent idiomatic use of the Chinese language and understanding of Chinese culture. Includes an introduction to some of the masterpieces of Chinese literature in translation.
Prerequisite: CH 301 or its equivalent.

CH 303 - Readings in Chinese (3)
Designed to build vocabulary, reading skills, and recognition of Chinese characters using progressively more difficult authentic materials: signs, schedules, menus, bulletins, information sheets, and selections from newspapers, journals, and contemporary literature.
Prerequisite: CH 202 or its equivalent or permission of the instructor.

CH 304 - Composition (3)
Designed to develop practice in writing simple everyday communications such as correspondence, forms, reports, and short compositions. Stress on developing grammar skills, use of Chinese characters, and use of set conventional forms.
Prerequisite: CH 202 or its equivalent or permission of the instructor.

**CH 334 - Chinese Culture and Civilization (3)**
General introduction to China as a nation, pursuing its impressive political, social, economical, and technological accomplishments that made it one of the most advanced countries in the world for centuries. From this examination, students will understand various aspects of Chinese culture and civilization, and be able to identify and explain them in literature and cinema.
Prerequisite: CH 202 or the equivalent, or permission of the instructor.

**CH 335 - Contemporary Chinese Culture (3)**
An advanced course in Chinese culture and civilization intended for students who are interested in learning about contemporary Chinese culture(s) and civilization.
Prerequisite: CH 202 or its equivalent or permission of the instructor.

**CH 337 - Chinese Linguistics (3)**
Introduction to Chinese linguistics, particularly phonological and syntactical structures and communication patterns. Readings and discussions include an examination of the similarities and differences between Chinese and English.
Prerequisite: CH 202 or its equivalent or permission of the instructor.

**CH 338 - Business Chinese (3)**
Provides a descriptive introduction to Chinese business culture embedded in Chinese culture and provides training in Chinese business language with an emphasis on various commercial forms and terminology used in business, banking, and other industries. Culture component taught in English.
Prerequisite: CH 202 or two years of study in the target language at the college level (or the equivalent).

**CH 400 - Chinese Study Abroad (3 TO 9)**
Study of intermediate or advanced Chinese language(s), literature, or culture(s) in a foreign country where students are immersed within the Chinese culture. May include seminars arranged during travel.
Prerequisite: permission of the department chairperson.
A total of 9 credits may be earned.

**CH 401 - Contemporary Masterpieces (3)**
Reading and discussion of selected modern Chinese literary texts concentrating on selections from poetry, short stories, essays, and novels. Readings in English translation and Chinese.
Prerequisite: CH 302 and 303 and 304.

**CH 402 - Classical Masterpieces (3)**
Introduction to classical Chinese texts of literary and historical significance. Includes selections from major works of fiction, poetry, essay, and drama. Readings in English translation and Chinese.
Prerequisite: CH 302 and 303 and 304.

**CH 403 - Advanced Reading and Writing (3)**
Designed to develop practice in reading and writing at a level high enough to function in business and industry. Stress on developing vocabulary, Chinese characters, and conventional forms.
Prerequisite: CH 302 and 303 and 304.

**CH 404 - Seminar in Language (3)**
Designed to develop communications skills at a level high enough to function in academic, business, and industry. Stress on developing advanced grammar, speaking and listening skills, and communication strategies in various contexts.
Prerequisite: CH 302 and 303 and 304.

**CH 405 - Seminar in Translation (3)**
Training students in skills in translating Chinese into English, and vice versa, to prepare them for a career in which such skills are required, such as the business world or foreign relations.
Prerequisite: CH 302 and 303 and 304.

**CH 498 - Readings (1 TO 9)**
Individualized readings or research to allow students to explore special topics with an individual instructor.
Prerequisite: permission of the instructor.
A total of 9 credits may be earned.

**CHEM - CHEMISTRY**

**CHEM 100 - People and Chemistry (3)**
Introductory treatment of fundamental concepts of chemistry, such as organization and language of chemistry, atomic structure, nature and classification of matter, radioactivity, and the relevancy of these topics to everyday living. Core Transfer Library: Physical Sciences (IPS 1720)
Not open to students who have credit in CHEM 101, CHEM 111.
CHEM 101 - General, Organic, and Biochemistry for the Health Sciences (5)
Introduction to and general principles of general chemistry, organic chemistry, and biochemistry. Designed for students in the health sciences and related areas. Four hours of lecture and one two-hours recitation-laboratory weekly. Core Transfer Library: Physical Sciences (IPS 1723)
Not open to students who have credit in CHEM 111.

CHEM 102 - General, Organic, and Biochemistry for Experienced Health Professionals (4)
Introduction to and general principles of general chemistry, organic chemistry, and biochemistry. Designed for students who have significant paid clinical experience. Four hours of lecture and two hours of virtual exercises weekly.
Prerequisite: significant paid clinical experience. Not open to students who have credit in CHEM 101.
Open only to off-campus students or those with significant paid clinical experience as an LPN, or equivalent certification as determined by the nursing department.

CHEM 108 - Introduction to Chemistry (3)
Introduction to the principles of general chemistry with a focus on elements, atomic and molecular structure, chemical bonding, chemical reactions, stoichiometry, status of matter, and solutions. Designed for those with a limited background in chemistry. Two hours of lecture and one two-hour recitation-laboratory weekly.
Not open to students who have credit in CHEM 101 or CHEM 111.

CHEM 111 - General Chemistry 1 (4)
Chemistry of the elements and their compounds with emphasis on basic principles. Atomic and molecular structure, chemical bonding, stoichiometry, properties of solutions, and nature of matter. Three hours of lecture and one three-hour recitation-laboratory period weekly. Core Transfer Library: Physical Sciences (IPS 1721).
Prerequisite: ALEKS Math placement score of 30 or MATH 108 or any higher level Math course or permission of the department chairperson.

CHEM 112 - General Chemistry 2 (4)
Continuation and extension of CHEM 111, including chemical kinetics, electrochemistry, chemical equilibrium, chemistry of metals and nonmetals, and radioactivity. Three hours of lecture and one three-hour recitation-laboratory period weekly. Core Transfer Library: Physical Sciences (IPS 1722)
Prerequisite: CHEM 111 and MATH 108 or MATH 111 or MATH 112 or MATH 161 or MATH 162 or MATH 165 or MATH 166 or equivalent math placement scores.

CHEM 200 - Society and Chemistry (3)
A study of how the demands of society drive the development of chemistry, as well as how the discovery and application of chemical technologies drive the development of society.
Prerequisite: UCC Tier 1 Natural Science Domain course.

CHEM 225 - Chemical Analysis (3)
Lecture and intensive laboratory treatment of the theory and practice of representative quantitative chemical measurements, including gravimetry, visual and potentiometric titrations, ion exchange, coulometric and conductometric titrations, and visible spectrophotometry. One and one-half hours of lecture and four and one-half hours of laboratory weekly.
Prerequisite: CHEM 112.

CHEM 230 - Organic Chemistry for the Life Sciences (3)
One-term sophomore level service course which focuses on the structure and reactivity of the functional groups which are directly relevant to biochemistry. Consolidates the relevant fundamental principles of organic chemistry with less depth than the CHEM 231/232 two-term organic sequence, and will prepare students for the one-term CHEM 360 (Essentials of Biochemistry) course. Each topic will include biologically relevant examples and applications.
Prerequisite: CHEM 112 with a grade of C or better.
Parallel: CHEM 241.
Not open to students who have credit in CHEM 231, or chemistry majors and chemistry teaching majors.

CHEM 231 - Organic Chemistry for Molecular-Based Sciences: Part 1 (3)
First course in a two-semester sophomore level sequence which focuses on introductory organic chemistry. This first semester will focus on structure and fundamental properties of organic molecules, and will introduce principles of reactivity. Designed for chemistry majors, pre-professional majors requiring organic chemistry, and other molecular science based majors.
Prerequisite: CHEM 112 with a grade of C or better.
Parallel: CHEM 241.
CHEM 232 - Organic Chemistry for Molecular-Based Sciences: Part 2 (3)
Second course in a two-semester sophomore level sequence which focuses on introductory organic chemistry. This second semester will continue directly from CHEM 231 and will focus on reactivity of the common functional groups, an introduction to the spectroscopic techniques relevant to organic chemistry, and synthesis. Designed for chemistry majors, pre-professional majors requiring organic chemistry, and other molecular science based majors.
Prerequisite: CHEM 231 with a grade of C- or better.
Parallel: CHEM 232.

CHEM 234 - Organic Chemistry 1 (5)
A beginning course in organic chemistry for students concentrating in chemistry. Lecture material includes nomenclature, covalent bonding, molecular structure, and functional group chemistry of organic compounds. Laboratory experience includes spectroscopy and syntheses. Three hours of lecture and two three-hour laboratory periods weekly.
Prerequisite: CHEM 112.

CHEM 235 - Organic Chemistry 2 (5)
A continuation of CHEM 234, including the properties of carbohydrates, proteins, and other natural products. Laboratory experience includes qualitative organic analysis and multistep syntheses. Three hours of lecture and two three-hour laboratory periods weekly.
Prerequisite: CHEM 234.

CHEM 241 - Organic Chemistry Laboratory 1: Fundamental Techniques (1)
One-term sophomore level laboratory course designed to be taken in the same semester as the first term of organic chemistry lecture. This lab course will introduce students to the fundamental principles and laboratory techniques of organic chemistry including extraction, recrystallization, separation, distillation, chromatography and characterization.
Prerequisite: CHEM 112 with a grade of C or better.
Parallel: CHEM 230 or 231.

CHEM 242 - Organic Chemistry Laboratory 2: Synthesis and Characterization (1)
One-term sophomore level laboratory course designed to be taken in parallel with CHEM 232 lecture course. This lab course will introduce students to chemical reactions and functional group transformations related to halogens, aromatic rings, ketones, aldehydes, carboxylic acids, alcohols, imines, and amines.
Prerequisite: CHEM 231 and CHEM 241 with a grade of C- or better in each.
Parallel: CHEM 232.

CHEM 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

CHEM 325 - Instrumental Methods of Analysis (3)
Practical applications of modern chemical instrumentation: electrometric, chromatographic, and spectroscopic methods. For chemical/medical technologists or departmental minors. Two hours of lecture and one three-hour laboratory weekly.
Prerequisite: CHEM 225.

CHEM 360 - Essentials of Biochemistry (3)
One-term service course designed for students in life sciences, dietetics, and medical technology. Consolidates the relevant fundamental principles of biochemistry with less depth than the CHEM 463/464 two-term biochemistry sequence. The biochemistry of proteins, carbohydrates, lipids, and nucleic acids will be covered, as well as an introduction to metabolism and the regulation of metabolic processes.
Prerequisite: CHEM 230 or CHEM 232 with a minimum grade of C-.
Parallel: CHEM 361.
Not open to chemistry majors and chemistry teaching majors.

CHEM 361 - Introductory Biochemistry Laboratory (1)
One-term sophomore level laboratory course designed to complement the one-term biochemistry lecture. It is designed to introduce chemistry of biological molecules and to emphasize important laboratory techniques in biochemistry. Topics include carbohydrate, amino acid, and protein chemistry as well as enzyme kinetic analyses, electrophoresis, and ultraviolet/visible spectral analysis.
Prerequisite: CHEM 241 with a final grade of C- or better.
Parallel: CHEM 360.

CHEM 369 - Professional Experience (1 TO 3)
Paid work and learning experience as a practicing chemist. Practical problem-solving experience will be gained through such programs as internships, practicums, cooperative education programs, and the Department of Chemistry summer research program.
Prerequisite: application, recommendation of the program selection committee, and permission of the department chairperson.
A total of 5 credits may be earned (3 towards major), but no more than 3 credits in any one semester or term. One credit may be counted toward the Associate in Science in Chemical Technology degree.

No more than 3 credits may be counted as electives toward the departmental major.

**CHEM 375 - Specialized Topics in Chemistry (1 TO 4)**
Discussion or experimentation, or both, in specialized topics in and related to chemistry. Information concerning specific topics that are offered during a given semester is available from the departmental office. Lecture, discussion, and laboratory schedules appropriate to the topic offered. Prerequisite: permission of the department chairperson.
A total of 4 credits may be earned, but no more than 1 credit may be counted toward departmental major or minor requirements.

**CHEM 389 - Chemical Technology Practicum (1)**
Practical experience in real or simulated industrial laboratory situations for chemical technologists. Assignments equivalent to four clock hours a week. Prerequisite: CHEM 325; permission of the department chairperson.
Not applicable toward majors or minors in chemistry.

**CHEM 400 - Chemical Communications (1)**
Use of scientific literature; sources and classification systems; current and retrospective searches in the specialized branches of chemistry. Prerequisite: 20 credits of chemistry or permission of the department chairperson.

**CHEM 410 - Review of Chemistry Fundamentals (1)**
Senior level capstone course which reviews fundamental chemistry concepts in the areas of physical, organic, inorganic, analytical, and biochemistry and develops critical thinking skills. Focus will be placed on reviewing this material and by practicing multiple choice questions in order to prepare the students for objective tests such as the ETS Major Field Test in Chemistry and the Graduate Record Exam in Chemistry. Prerequisite: CHEM 225. Parallel: CHEM 444 or CHEM 445. Open only to chemistry and chemistry teaching majors.

**CHEM 420 - Chemical Instrumentation 1 (3)**
Theoretical principles and applications of selected optical spectroscopic, mass spectroscopic, electrochemical, thermal, and chromatographic methods of chemical analysis with illustrative experiments. Two hours of lecture and one three-hour laboratory period weekly. Prerequisite: CHEM 225 and CHEM 232 or CHEM 235 or permission of the department chairperson.

**CHEM 421 - Chemical Instrumentation 2 (3)**
Advanced treatment of selected topics in spectroscopy, electrochemistry, and chromatography. Introduction to mass spectroscopy, nuclear methods, thermal and surface analysis. Three hours of lecture weekly. Prerequisite: CHEM 420 or permission of the department chairperson.

**CHEM 430 - Intermediate Organic Laboratory Techniques (2)**
Upper-level laboratory course that includes multistep syntheses of organic compounds and their isolation, purification, and characterization using modern spectroscopic and chromatographic techniques. Six hours of laboratory weekly. Prerequisite: CHEM 232 and CHEM 242 with a grade of C- or better.

**CHEM 440 - Selected Principles of Physical Chemistry (3)**
Some of the well-established physical concepts that allow us to understand basic chemical phenomena at the molecular level will be explored. Topics include, but are not limited to, quantum chemistry, group theory, spectroscopy, and chemical kinetics. Understanding these fundamental physical chemistry principles will provide the basic framework for all other branches of chemistry. Prerequisite: CHEM 232 and MATH 161. Not open to students who have credit in CHEM 444.

**CHEM 444 - Physical Chemistry 1 (4)**
Some of the well-established physical concepts that allow us to understand basic chemical phenomena at the molecular level will be explored. Topics include, but are not limited to, quantum chemistry, group theory, spectroscopy, and chemical kinetics. Understanding these fundamental physical chemistry principles will provide the basic framework for all other branches of chemistry. Prerequisite: CHEM 232 and MATH 166; PHYC 110 and PHYC 112 or PHYC 120 and PHYC 122.

**CHEM 445 - Physical Chemistry 2 (4)**
Underlying physical principles that govern the properties and behavior of chemical systems will be addressed. These concepts will include the thermodynamic (classical and statistical) description of chemical processes and properties
of solids, liquids, gases, and solutions. Concepts such as heat, work, enthalpy, entropy, and free energy will be taught. Understanding these physical chemistry principles will provide the basic framework for all other branches of chemistry.

Prerequisite: CHEM 232 and MATH 166; PHYC 110 and PHYC 112 or PHYC 120 and PHYC 122.

CHEM 450 - Inorganic Chemistry (3)
Chemistry of the elements, including the relationships of chemical properties and atomic and molecular structure, chemical bonding acid-base theories, chemical periodicity, and modern theories of coordination compounds. Three hours of lecture weekly.
Prerequisite: CHEM 232 with a minimum grade of C and MATH 165.

CHEM 454 - Inorganic Chemistry and Organometallic Synthesis Laboratory (2)
Practice and principles of both the synthesis and the characterization of inorganic and organometallic compounds. One hour of lecture and three hours of laboratory weekly.
Prerequisite: CHEM 232 and CHEM 242 with a minimum grade of C and MATH 165.
Parallel: CHEM 450.

CHEM 463 - Principles of Biochemistry 1 (3)
Chemistry of proteins, enzymes, nucleic acids, carbohydrates, and lipids. For chemistry, life sciences, and premedicine majors. Three hours of lecture weekly.
Prerequisite: CHEM 232 or CHEM 235.

CHEM 464 - Principles of Biochemistry 2 (3)
Continuation and extension of CHEM 463 including biological oxidations and energy transfers; metabolism of carbohydrates, lipids, proteins, and nucleic acids; and regulation of metabolic processes. Three hours of lecture weekly.
Prerequisite: CHEM 463.

CHEM 465 - Biochemistry Laboratory Techniques (2)
One-term laboratory with lecture course designed to introduce and emphasize important laboratory techniques in biochemistry. Topics includes bioinformatics, PCR, nucleic acid purification, enzyme kinetic analyses, electrophoresis, high performance liquid chromatography, fluorescence spectrometry and ultraviolet/visible spectral analysis.
Prerequisite: CHEM 232.
Prerequisite or parallel: CHEM 463.

CHEM 470 - Independent Study and Research (1 TO 3)
Scientific investigation on an individual basis under the supervision of a faculty member. Extensive reading, experimental work, and development of research techniques and skills.
Prerequisite: permission of the department chairperson.
A total of 5 credits may be earned (3 towards major), but no more than 3 in any one semester or term.
No more than 3 credits may be counted as electives toward any departmental major.

CHEM 475 - Exploration of Selected Topics in Chemistry (1 TO 4)
Discussion or written reports or both in advanced special topics in or related to chemistry. Examples are topics in neurochemistry, physical organic, chemical synthesis, kinetics, spectroscopy, etc.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned (3 towards major), but no more than 4 in any one semester or term.

CIS - COMPUTER INFO SYSTEMS
CIS 226 - Business Systems Application Development (3)
Apply information technology to business operations and procedures by developing business software solutions. With an emphasis on hands-on exercises, students learn various business software development methodologies, such as abstraction, process flow, variable assignment, graceful error handling, and documentation.
Prerequisite: ISOM 210 or permission of the department chairperson.

CIS 228 - Advanced Microcomputer Applications for Business (3)
Uses office productivity tools to solve business problems for small- and medium-sized organizations. Emphasis on using complex formulas and advanced functionality to solve problems and to manipulate, analyze, and visualize data.
Prerequisite: minimum grade of C in ISOM 125 or equivalent or permission of the department chairperson.

CIS 311 - Information and Enterprise Systems: Analysis and Design (3)
Introduction to various concepts and techniques of enterprise systems with applications to solving managerial problems. Emphasis on integration of all relevant organization systems. Various systems analysis and design concepts and techniques, including the key steps in the systems design and development process. Emphasizes the consideration of practical business applications.
Prerequisite: ISOM 210 or permission of the department chairperson.

CIS 313 - Databases and Information Resource Management (3)
Management of information resources; knowledge, techniques, and skills involved in planning, controlling, organizing, selecting, and retaining information resources in business, industry, and government. Includes database and information resource management theory, and hands-on computer application exercises using database management software.
Prerequisite: ISOM 125 with a minimum grade of C; or permission of the department chairperson.

CIS 317 - Computer Networks for Business (3)
Concepts and problems of transmitting, communicating, and managing business data needs through telecommunication and computer networks. Topics include: evaluation of information services in organizations, designing and budgeting of computer network to improve information services, and information technology solutions for regulation compliance.
Prerequisite: ISOM 210 or permission of the department chairperson.

CIS 410 - Information Systems Security (3)
Concepts and methods of planning, designing, implementing, managing, and auditing security for the typical information services. Topics include: applicable law and regulations, information policy, operating systems protection mechanisms, intrusion detection systems, formal models of security, cryptography, network and distributed systems security, denial of service attack strategies and defense, worms, viruses, and Internet secure applications.
Prerequisite: CIS 317 or permission of the department chairperson.

CIS 411 - Integration Project (1)
Requires students to plan, develop, and present a capstone project in information systems or operations management. In addition to class meeting time, ISOM students will be required to meet in arranged times to complete a capstone project.
Prerequisite: CIS 311; senior standing.

CIS 412 - Business Process Analysis and Design (3)
Various systems analysis and design concepts and techniques, including the key steps in the planning, design, development, management, and evaluation of information services in organizations. Emphasizes the consideration of practical applications within the business environment, information policy, and applicable laws and regulations.
Prerequisite: CIS 226 (waived for CS with IS minor), and ISOM 300.

CIS 413 - Database Management Systems (3)
Concepts of database management systems, data models, the entity-relationship (ER) diagrams, design and implementation of database application, database administration, structured query language (SQL), distributed databases and data warehousing. Course provides a significant hands-on experience using a DBMS, such as MS SQL server, and data modeling tools to plan, design, and develop a database application that supports business operations.
Prerequisite: CIS 210.

CIS 414 - Information Systems of Small Business (3)
Computer-based information systems in small business operations without access to an internal specialist. Includes the identification of information requirements and the use of mainframe and microcomputers and purchased software to satisfy the information needs in small business.
Prerequisite: ENT 341; MGT 300.

CIS 415 - Information Systems Management (3)
Equipment selection, equipment acquisition, computer operations management, project management, computer personnel management, financial control, systems security and control, and the relationship of the information systems function to an organization.
Prerequisite: ISOM 210 or permission of the department chairperson.

CIS 419 - Problems in Information Systems (3)
An integration of various information systems principles, theories, and techniques for implementing information systems in organizations, including strategic issues. Includes lectures, tours, readings, cases, and the completion of a major group project.
Prerequisite: CIS 412.

CIS 420 - Knowledge Management (3)
Knowledge management systems leverage the intellectual assets of the firm, facilitating delivery of e-commerce and e-business. Topics: how knowledge is created, captured, represented, stored, and reused. Exploration of approaches to managing both explicit and tacit knowledge, and technologies that support KM. Case studies and computer demonstrations included.
Prerequisite: CIS 311, CIS 313; or permission of the department chairperson.
CIS 421 - Network and Security Management (3)
Presents a comprehensive overview of telecommunication network management, computer and network security. Network management using current operating systems, enterprise security framework, network defense, risk assessment, OS hardening, security tools to prevent break-ins, computer forensics, disaster recovery, security practices, and policies. Provides a significant hands-on experience in penetration testing and defenses. Prerequisite: CIS 317, CIS 410, or permission of the department chairperson.

CIS 422 - Health Care Information Systems (3)
Provides an overview of current developments, issues and challenges in the emerging field of health informatics—the application of information and communication technology for the acquisition, storage, management and use of information in health care, the study of human-computer interaction, human factors, and the consideration of social and organizational factors related to successful technology deployment. Prerequisite: ISOM 210 or permission of the department chairperson.

CIS 424 - Organizational Information Assurance (3)
Examines the rationale and procedures for securing the physical and electronic components of information systems, including networks, operating systems, data, and applications. Identifies and evaluates detailed strategies for defining information security and establishing information assurance goals. Training for security awareness and incident response to system compromise are covered, as well as defense strategies, configuration management, and legal issues. The importance of establishing an information technology (IT) baseline will be covered in-depth from an organizational and managerial decision-making perspective. Prerequisite: CIS 410.

CIS 430 - ERP Application and Process Integration (3)
Exposes students to the concepts of Enterprise Resource Planning (ERP), cross functional integration through ERP, business process reengineering, architecture of ERP Systems, ERP project implementation methodologies and customization issues, critical success factors, outsourcing, and the human side of ERP. Offers an experiential learning experience through some functional modules of SAP. Prerequisite: ISOM 210 or permission of the department chairperson.

CIS 431 - Enterprise Resource Planning - 2 (3)
Provides the basic knowledge of the ABAP/4 Development Workbench. Also prepares students to become ABAP/4 Consultants by providing a learning environment similar to an actual SAP work environment. Prerequisite: CIS 413.

CIS 450 - E-Commerce Design and Applications (3)
Presents a comprehensive overview of electronic commerce design and applications. Topics include e-business models, infrastructure, security, payment systems, development methodologies, applicable law and regulations, and strategies. Prerequisite: CIS 226 or permission of the department chairperson.

CIS 456 - Information Technology and Business Analytics (3)
Focuses on analyzing statistical data to identify patterns and trends to understand and solve business issues and to use tools for data-driven decision making. The topics include: data-mining techniques, data-management and other business processes. Prerequisite: ECON 221 or equivalent or permission of the department chairperson.

CIS 490 - Information Systems Integration Project (3)
Integrates the supporting principles of information technology, computer systems management, and business operations into the completion of a capstone project. Requires students to plan, develop, and present a project that serves the information needs of a business. In addition to class meeting time, information systems students will be required to meet at arranged times to complete a capstone project. Prerequisite: ISOM 300, CIS 317, CIS 412, and senior standing.

CJC - CRIM JUSTICE & CRIM
CJC 101 - Introduction to American Criminal Justice System (3)
Overview and analysis of the American criminal justice system. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1030)

CJC 102 - Introduction to Criminology (3)
Examines the legal definitions of criminal and delinquent behavior; typologies of crime and criminals; trends in reported distribution of crime and delinquency within the population; and theoretical explanations.

CJC 211 - Race, Gender, and Crime (3)
Examines racial, ethnic, gender, and class issues regarding criminal offenders, victims, and employees of the criminal
justice system. Focus is given to the development of cultural competency skills and practices.
Prerequisite: CJC 101 and CJC 102 or by permission of the department chairperson.
Open only to CJC majors and minors.

CJC 220 - Research Methods in Criminal Justice (3)
Introduction to research methods pertinent to the study of crime, criminality, and the criminal justice system. Emphasizes the design, development, use, and ethical concerns of both qualitative and quantitative research.
Prerequisite: CJC 101, CJC 102; or permission of the department chairperson.

CJC 229 - Decision-Making and Ethics in Criminal Justice (3)
Examines decision making in the American criminal justice system. Ethical systems are applied to justice system decision making. An emphasis is placed on ethical principles and concerns impacting the justice system.
Prerequisite: CJC 101 and CJC 102. Open only to CJC majors and minors.

CJC 230 - Introduction to Policing (3)
Examination of the development of the police in America in the past, present, and future. Emphasizes institutional context of police activity, bureaucratization of the police, professionalization, role of the police, and police/community change.
Prerequisite: CJC 101, CJC 102; or permission of the department chairperson.

CJC 240 - Introduction to Corrections (3)
Introduction to penology emphasizing the history, philosophy, programs, policies, and problems associated with correctional practice. Topics include probation, prisons, jails, parole, community corrections, and alternative sanctions.
Prerequisite: CJC 101, CJC 102; or permission of the department chairperson.

CJC 250 - Introduction to Courts/Judiciary (3)
Introduction to the American court and judicial systems emphasizing their structure, operation, and objectives.
Prerequisite: CJC 101, CJC 102; or permission of the department chairperson.

CJC 251 - Criminal Law (3)
Examines the functions of substantive criminal law; its historical foundations and limits. Emphasis is placed on Indiana criminal law.
Prerequisite: CJC 101 and CJC 102.

Open only to CJC majors and minors.

CJC 301 - Evaluation Research in Criminal Justice (3)
This course examines how evaluation research is used to study crime, criminality, policy, and the criminal justice system. The underlying assumptions of statistics are learned, research methods are evaluated, statistical tests are interpreted, and evaluation research skills are learned in order to teach students how to draw conclusions about the utility and application of criminal justice-related research findings.
Prerequisite: CJC 101 and CJC 102 and CJC 220.
Open only to CJC majors.

CJC 309 - Juvenile Justice and Delinquency (3)
This course examines theoretical explanations of delinquency and the juvenile justice system. Delinquency is examined from numerous perspectives, including the role of families, communities, schools, and genetics. The examination of responses to delinquency include those by the police, courts and correctional institutions.
Prerequisite: CJC 101 and CJC 102.
Open only to CJC majors and minors.

CJC 332 - Victimology (3)
The purpose of this course is to examine the correlation of victimization and victimization theories. It also examines victims’ reactions and various responses made to victims by the criminal justice system and other societal agencies.
Prerequisite: CJC 101 and CJC 102.
Open only to CJC majors and minors.

CJC 333 - Policing in Free and Diverse Society (3)
This course is an examination of issues and developing trends confronting police in the United States. It examines issues of police and policing including organizations and management, minorities in policing, police deviance, use of force, and community policing. It emphasizes developments in the provision of law enforcement and social services by the police at the local, state, and federal levels.
Prerequisite: CJC 101 and CJC 102 and CJC 230.
Open only to CJC majors and minors.

CJC 340 - Institutional Corrections (3)
This course provides an in-depth inquiry into the function, structure, and operation of American adult and juvenile correctional institutions.
Prerequisite: CJC 101 and CJC 102 and CJC 240.
Open only to CJC majors and minors.
CJC 341 - Community Corrections (3)
This course examines the organization and operation of community-based correctional programs throughout the United States. Topics include probation, parole, halfway houses, group homes, diversion, restitution, and community service programs, with an emphasis on best practice.
Prerequisite: CJC 101 and CJC 102 and CJC 240.
Open only to CJC majors and minors.

CJC 350 - Criminal Evidence and Procedure (3)
This course intends to enhance the student’s understanding of the rules of evidence in criminal proceedings. In criminal trials, the primary goal of the rules of evidence is intended to secure a defendant’s constitutional right to a fair trial. Rules of evidence are not only important for the protection of the fundamental rights of the accused, but also are necessary in maintaining the integrity of the criminal justice system.
Prerequisite: CJC 101 and CJC 102 and CJC 250.
Open only to CJC majors and minors.

CJC 369 - Paid Professional Experience in Criminal Justice and Criminology (6 TO 15)
Paid, individual assignment under field supervision in one of a variety of criminal justice settings.
Prerequisite: senior standing, 2.5 grade-point average, permission of the department chairperson.
A total of 12 credits may be earned.
Not open to students who have credit in CJC 479. Open only to CJC majors.

CJC 390 - Honors Colloquium in Criminal Justice (1)
Exploration of selected issues and topics in criminal justice with emphasis on individualized study, reporting, and group discussion.
Open only to honors students; others by permission of the department chairperson.

CJC 396 - Advanced Criminology (3)
This course engages students in the process of understanding, evaluating, and empirically testing the major theories of crime causation. Further, students will be able to summarize the major schools of thought related to criminological theories, including, but not limited to, the historical context and primary assumptions of these theories as they relate to criminal behavior and social policy.
Prerequisite: CJC 101 and CJC 102.
Open only to CJC majors and minors.

CJC 397 - Constitutional Issues in Criminal Justice (3)
This class explores legal precedents in the criminal justice system. Analyses of appellate court decisions are limited to those that are related to the 1st, 2nd, 4th, 5th, 6th, 8th, and 14th amendments. Topics include criminal investigations, custody, interrogations, searches and seizures, trial components, and sentencing.
Prerequisite: CJC 101 and CJC 102 and CJC 250.
Open only to CJC majors and minors.

CJC 398 - Human Services in Criminal Justice (3)
This course examines offender characteristics and needs, and explores how human services can meet those needs. Special attention is paid to human service policies and practices in prevention efforts, criminal justice interventions, and reentry.
Prerequisite: CJC 101 and CJC 102.
Open only to CJC majors and minors.

CJC 399 - Special Populations in Criminal Justice (3)
This course examines special populations within the US criminal justice system, including (but not limited to) offenders with mental illness, elderly offenders, and offenders with HIV/AIDS. This course addresses the specific needs of each special population, as well as legal and ethical issues arising from their treatment in criminal justice contexts.
Prerequisite: CJC 101 and 102.
Open only to CJC majors and minors.

CJC 410 - Current Topics in Criminal Justice and Criminology (3 TO 6)
Examines contemporary issues and topics in the criminal justice and criminology fields. The specific course topic is faculty-selected and delivered through various platforms, including individualized study, reporting, group discussion, or field study and observation.
Prerequisite: CJC 101 and CJC 102.
A total of 6 credits may be earned.
Open only to CJC majors and minors.

CJC 430 - Current Topics in Policing (3 TO 6)
Exploration of selected issues and topics in policing and law enforcement emphasizing individualized study, reporting, and group discussion.
Prerequisite: successful completion of CJC 101, CJC 102, CJC 220, CJC 221, CJC 230, CJC 240, CJC 250, and junior or senior standing.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.
Open only to criminal justice majors and minors.
CJC 440 - Current Topics in Corrections (3 TO 6)
Exploration of selected issues and topics in penology emphasizing individualized study, reporting, and group discussion.
Prerequisite: CJC 101, CJC 102, CJC 220, CJC 221, CJC 230, CJC 240, CJC 250, and junior or senior standing.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.
Open only to criminal justice majors and minors.

CJC 450 - Current Topics in Legal Aspects of Criminal Justice (3 TO 6)
Exploration of selected issues and topics in legal aspects of criminal justice emphasizing individualized study, reporting, and group discussion.
Prerequisite: successful completion of CJC 101, CJC 102, CJC 220, CJC 221, CJC 230, CJC 240, CJC 250, and junior or senior standing.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.
Open only to criminal justice majors and minors.

CJC 471 - Practicum in Criminal Justice and Criminology (3 TO 6)
Part-time individual assignment under field supervision in one of a variety of criminal justice settings.
Prerequisite: successful completion of CJC 101, CJC 102, CJC 220, CJC 221, CJC 230, CJC 240, CJC 250; 2.5 grade-point average; permission of the instructor, and senior standing.
A total of 6 credits may be earned.
Open only to criminal justice majors.

CJC 479 - Professional Experience in Criminal Justice and Criminology (6 TO 15)
Non-paid, individual assignment under field supervision in one of a variety of criminal justice settings.
Prerequisite: senior standing, 2.5 grade-point average, permission of the department chairperson.
A total of 12 credits may be earned.
Not open to students who have credit in CJC 369.
Open only to CJC majors.

CJC 490 - Independent Study in Criminal Justice (3)
This course involves researching a relevant topical area in criminal justice agreed upon by the instructor and student. Course topics will vary based on the research specialization of the instructor, but emphasis will be placed on formulating and completing original research.
Prerequisite: permission of the department chairperson.

Open only to CJC majors and minors.

CJC 495 - Capstone in Criminal Justice (3)
As the capstone class for CJC majors, this course evaluates data driven and evidence-based practices in criminal justice. Evaluations of criminal justice practices include historical information as well as current evidence-based and data driven practices within the field.
Open only to CJC majors with senior status.

CM - CONSTRUCTION MANAGEMENT
CM 104 - Introduction to Construction (3)
Overview of the aspects of construction management including designer-builder relationships, construction documents, estimating, scheduling, project management, safety, materials, and other relevant subjects.

CM 106 - CAD for Construction Management (3)
Focuses on the application of computer-aided design processes in construction management.

CM 180 - Construction Documents (3)
Overview in the reading and utilization of construction documents, including print reading. Use and analysis of the project manual and specification sections, bidding documents, and other relative subjects.
Prerequisite: CM 104.

CM 200 - Site Preparation (3)
The study of the processes related to the preparation of a construction site. Specific topics include the fundamentals of surveying, soil types, and foundation systems.

CM 206 - Building Information Modeling (BIM) for Construction Management (3)
Application of Building Information Modeling (BIM) in construction management, including creating three-dimensional models of projects, extracting quantities of materials, creating animations, time-phased simulations, and clash detection/correction.
Prerequisite: CM 104 and 180.

CM 222 - Technical Presentation for Construction Managers (3)
Examines presentation of technical information for construction managers, including oral and written communication in technical and professional settings.
Prerequisite: ENG 103 or 104 or 114 and COMM 210.
CM 230 - Renovation of Residential Structures (3)
An immersive learning class focusing on the processes, strategies, and documents involved in the renovation of residential structures. Interdisciplinary teams of students will work with local community organizations and agencies to develop renovation plans for existing houses, including the development of preliminary preconstruction documentation needed for this type of work.
A total of 6 credits may be earned.

CM 250 - Construction Methods and Materials 1 (3)
Introduction to the application of sequential construction methods combined with the study of materials as they are utilized in structures. Special emphasis on the role of a construction manager in the proper handling and utilization of construction materials.

CM 251 - Construction Methods and Materials 2 (3)
Team-based integration and management of construction, documentation, testing, and application of construction materials for a specified structure. Special emphasis on the use of concrete, steel, and minor supporting materials to fabricate and combine free-spanning structural components for a specified structural project.

CM 252 - Building Diagnostics (3)
Overview of building construction and energy systems, energy audit techniques, principles of heat transfer and air movement. Field and laboratory work to include pressurization and remote heat sensing devices to measure energy loss in building.

CM 261 - Mechanical Construction Management (3)
The study of managing the construction of mechanical systems, including codes, design, methods, and materials related to plumbing, heating, ventilation, air conditioning, and fire sprinkler systems.
Prerequisite: CM 104 and 106 and 180.

CM 262 - Electrical Construction Management (3)
The study of managing the construction of electrical systems, including codes, design, methods, and materials.
Prerequisite: CM 104 and 106 and 180.

CM 280 - Construction Specifications for Construction Management (3)
Examines what construction specifications are, how they are developed, and how they are applied in construction management. Focuses on understanding and interpreting written construction documents and improving communication among all members of the construction team.
Prerequisite: CM 104 and 180.

CM 299X - Special Topics in Construction Management (1 TO 9)
Special topics relevant to the construction management profession. Course titles will be announced before each semester.
A total of 9 credits may be earned.

CM 300 - Structural Mechanics (3)
The study of static equilibrium, free-body, shear and bending-moment diagram. The computation of loads, moment, and shear for beams and trusses.
Prerequisite: MATH 112 or 132; PHYC 110.

CM 302 - Highway Construction 1 (3)
Basic knowledge of sources, properties, design methods, standards, tests, and uses of materials in various types of highway construction.
Prerequisite: CM 250.

CM 303 - Highway Construction 2 (3)
Highway construction methods and economic applications. Team development of construction scheduling and cost estimates for highway construction projects under closely simulated conditions.
Prerequisite: CM 302 and 355.

CM 310 - Ethics in Construction (3)
Examines professionalism within the modern construction industry. Traces the development of building professions with regard to the foundations of current practice. Focuses on career options and planning, leadership, ethics, and ethical practice using case studies and selected readings.
Prerequisite: CM 104.

CM 315 - Sustainable Construction (3)
Provides detailed knowledge related to sustainable construction. Emphasis will be on green building rating systems, and course work includes case studies, guest speakers, field trips, investigation of green materials, and a term project.

CM 320 - Estimating (3)
An introduction to estimating in construction. Reviews and incorporates knowledge of construction planning and processes, developing estimates using labor costs, and standards used by the industry.
Prerequisite: CM 104, 180, or permission of the department chairperson.
CM 350 - Mechanical and Electrical Systems (3)
The study of codes, design, methods, and materials related to electrical, plumbing, heating, ventilation, and air conditioning systems.

CM 355 - Planning and Scheduling (3)
Planning and scheduling practices for managing construction projects. Topics include parameters affecting planning, presentation of scheduling information, impact of changes, and resource allocation and management. Specific emphasis on critical path method, network diagramming, calculations, and computer applications.
Prerequisite: CM 104, 180, or permission of the department chairperson.

CM 365 - Construction Safety (3)
Study of the practices used to establish a safe and healthful environment for construction site personnel/occupants. Includes the codes and requirements of safety and health regulating agencies.

CM 380 - Internship in Construction Management (3)
Emphasizes internal or external placement in a construction management workplace. Provides opportunities to integrate and apply course content to the workplace. A paid or unpaid work experience for majors in the Construction Management program.
Prerequisite: CM 104 and permission of the Construction Management Internship Coordinator. A total of 6 credits may be earned.
Open only to construction management majors.

CM 381 - Internship in Construction Management 2 (3)
Emphasizes internal or external placement in a construction workplace. Provides opportunities to integrate and apply course content to the workplace. A paid or unpaid work experience for Construction Management majors.
Prerequisite: permission of the work experience coordinator.
May not take concurrently with CM 380.

CM 390 - Training and Development in Construction (3)
Training and development in construction professions and their relationship to the job and organization. Emphasizes skills needed to systematically plan, implement, evaluate, and revise training and development programs. Provides opportunities for practical application and practice.

CM 400 - Construction Project Management (3)
The study of project management concepts, procedures, and practices common in the construction industry. Includes construction project management concepts, roles, and responsibilities; labor relations; administrative systems and procedures; cost control data and procedures, documentation at job site and office; change orders; submittal processes; quality control philosophies and techniques; and computer applications.
Prerequisite: CM 104, 180, 320, 355, or permission of the department chairperson.

CM 420 - Construction Finance and Law (3)
The principles of business law applicable to the construction process including employer, employee, and client rights and obligations, and partnerships. The principles of finance related to construction are also covered.
Prerequisite: ACC 201.

CM 460 - Capstone in Construction (3)
A construction product, process, or system is studied. Conduct in-depth research on an approved topic related to construction. Results of the research are formally presented to peers and faculty.
Prerequisite: CM 222, 320, 355.
Prerequisite or parallel: CM 400 and 420.
Open only to majors in construction management with senior status.

CM 490 - Independent Study in Construction Management (1 TO 9)
Academic project directed by a Construction Management faculty member. Written proposal must be approved by program director prior to term of study.
Prerequisite: sponsorship by a CM faculty member and written proposal must be approved by CM program director prior to term of study.
A total of 9 credits may be earned.

COMM - COMMUNICATION STDS
COMM 201 - Exploration of Communication Studies (2)
An introduction to the study of communication for students new to the field. Provides guidelines for being a beginning communication student and scholar.
Open only to communication studies majors.
COMM 210 - Fundamentals of Public Communication (3)
Principles and practice of effective oral communication; analysis and evaluation of the speaking-listening process; preparation in message construction, emphasizing the selection, organization, and delivery of materials. Core Transfer Library: Communications (ICM 1103).

COMM 220 - Argumentation and Debate (3)
Explores argumentation theory through the practice of debate. While examining foundational theories of argument, the course provides students the opportunity to develop fundamental debate skills: invention, research, organization, delivery, refutation, and evaluation.

COMM 240 - Introduction to Interpersonal Communication (3)
Focuses on understanding interpersonal communication as a dynamic and complex system of interactions rather than on the skills of platform speaking. Stresses the importance of understanding and applying communication theory in everyday communication situations. Core Transfer Library: Communications (ICM 1101).

COMM 251 - Business and Professional Communication (3)
Explores a variety of communication issues in business and professional contexts, including gender, diversity, co-worker relationships, interviewing, group and team skills, leadership, and nonverbal communication. Also emphasizes written communication and oral presentation skills appropriate to business.

COMM 290 - Intercultural Communication (3)
Critical survey of major concepts in cross-cultural and intercultural interaction. Examines the effects of customs, behaviors, and values on the interpersonal communication process.

COMM 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester.

COMM 310 - Communication and Democracy (3)
Emphasizes the vital role that communication plays in America's political history. Examines various genres of discourse (e.g., speeches, pamphlets and handbills, political advertising, film) used to address political, social, and economic issues.

Prerequisite: COMM 210 or permission of the department chairperson.

COMM 320 - Persuasion (3)
Concerned with current theories and research related to persuasion and social influence. Specifically examines variables affecting implementation of persuasion principles and strategies. Designed to help students become critical consumers and effective, ethical producers of oral and written communication.

Prerequisite: COMM 210.

COMM 322 - Communication and Popular Culture (3)
Examines popular culture and teaches methods for evaluating the influential appeal of a variety of texts. Focuses on the power, potential, and problems of popular culture. Stresses the importance of using communication theory to understand everyday communication.

COMM 325 - Interviewing (3)
Examines the principles and types of interviews, with application of the principles in informational, persuasive, and employment interviews. Special attention is given to the various communication facets of the employment interview process: resumes, cover letters, selection interviews, and appraisal interviews.

COMM 330 - Small Group Communication (3)
Focuses on the theories, concepts, and processes of small group communication, decision making, and problem solving.

COMM 333 - Topics in Communication Studies (3)
Critical examination of relevant topics in the field of communication studies. Designed to help students become familiar with the theoretical, methodological, and contextual issues related to communication.

A total of 9 credits may be earned, but no more than 3 in any one semester or term.

COMM 335 - Communication and Health (3)
Examines communication processes in the health context. Explores effective and ineffective message design elements focused on health or illness. Identifies communication processes related to particular contexts such as the person, the relationship, the organization, or the larger culture.

COMM 340 - Leadership Communication (3)
Introduces students to classic and contemporary leadership theories, with an emphasis on the central role of leadership communication.
COMM 351 - Organizational Communication (3)
Introduces students to traditional and contemporary theoretical perspectives in the study of organizational communication, with an emphasis on the structure and function of communication in organizations.

COMM 360 - Communication Theory (3)
Introduction to the varied and complex underpinnings of the human communication phenomenon. Several theoretical perspectives and applications will be explored. Topics include message theories, intrapersonal and interpersonal theories, and group and public communication theories.
Prerequisite: COMM 201.

COMM 370 - Nonverbal Communication in Human Interaction (3)
Examines the nature, forms, and functions of nonverbal codes in human communication. Focuses on understanding one's own nonverbal communication and that of others.
Prerequisite: COMM 240 for communication studies majors; recommended for nonmajors.

COMM 375 - Presentational Communication (3)
Focuses on the preparation and delivery of presentations and longer speeches within a wide variety of communication settings. Uses both theory and practice in analyzing, organizing, and delivering presentations.
Prerequisite: COMM 210.

COMM 380 - Practicum in Communication Studies (1 TO 6)
Practical experience in intercollegiate debate, individual events, applied communication research, or alternate communication studies projects.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

COMM 385 - Rhetoric of Marginalized Voices (3)
Examines the challenges faced by underrepresented groups as they attempt to make their voices heard in the public sphere. Considers concepts such as freedom of expression, social responsibility, culture, power, race, ethnicity, sexual orientation, class, religion, and gender.

COMM 401 - Communication Studies Senior Seminar (1)
Designed to assist senior communication studies majors with their transition from the academy to the professional world. Students will participate in assessment and explore career opportunities.
Open only to communication studies seniors.

COMM 404 - Political Communication (3)
Examines the nature, forms, and effects of persuasion in organized political campaigns. Focuses on the skills needed to describe, analyze, and evaluate persuasive uses of language and to understand better the role of campaign persuasion.
Prerequisite recommended: POLS 372.

COMM 412 - Rhetorical Theory and Criticism (3)
Examines theories and methods of selected classical and modern critics as they relate to persuasive communication.
Prerequisite: COMM 320 or permission of the department chairperson.

COMM 425 - Speechwriting (3)
Examines the process of effective speechwriting in a variety of contexts (e.g., corporate, political, nonprofit). Emphasizes theoretical examination and pragmatic application of key skills such as understanding audience and context, gathering information, collaborating with a client, and capturing the speaker’s voice.
Prerequisite: COMM 210.

COMM 440 - Advanced Interpersonal Communication (3)
Examines contemporary theories, concepts, models, and pertinent research related to the communication process in interpersonal relationships to understand message exchanges and how they affect the people involved.
Examines the approaches, variables, and topics that influence social interaction.
Prerequisite: COMM 240 and 360.

COMM 441 - Contemporary Issues in Organizational Communication (3)
Study of contemporary theories of organizational communication, including cultural, critical/feminist, and postmodern theories. Examination of key theories of organizational communication in light of current organizational trends and social problems.
Prerequisite: COMM 351.

COMM 442 - Communication and Conflict Management (3)
Explores the strategies of productive and nonproductive conflict within the organizational setting. Theories of conflict are examined and explanations of the sources that stimulate conflict are investigated.
Prerequisite: COMM 240, 360.
COMM 450 - Rhetoric and Advocacy (3)
Students will employ their knowledge of and skills in rhetoric to address a need in the community.
Prerequisite: COMM 385, 412, or permission of the department chairperson.

COMM 452 - Applied Organizational Communication (3)
Focuses on the diagnostic skills and pragmatic analyses necessary to undertake needs assessments for training and development in organizations.
Prerequisite: COMM 351, 465.

COMM 475 - Coaching and Directing Secondary School Forensics (3)
Examines the rationale and philosophy of coaching and administering secondary school forensic programs.
Concentrates on selection of appropriate topics, materials, and coaching methods for interpretive, public address, and debate events. Includes development of coaching methods and philosophies, coaching ethics, forensic judging, and forensic program administration.
Prerequisite: COMM 220, 375.
Open only to English/language arts education majors or by permission of the instructor.

COMM 479 - Unpaid Professional Experience (1 TO 3)
Non-paid, supervised work and learning experience related to careers in communication with business firms and not-for-profit agencies. Job description may include, but is not limited to, research, training, organizing, program or event development and management, sales, promotions, human resources, and marketing.
Prerequisite: 18 credits in communication studies; permission of the department chairperson or internship coordinator.
A total of 6 credits may be earned, but not more than 3 in any one semester or term.
Open only to communication studies majors and minors.

COMM 489 - Paid Professional Experience (1 TO 6)
Paid, supervised work and learning experience related to careers in communication with business firms and not-for-profit agencies. Job description may include, but is not limited to, research, training, organizing, program or event development and management, sales, promotions, human resources, and marketing.
Prerequisite: 18 credits in communication studies; permission of the department chairperson or internship coordinator.
A total of 6 credits may be earned.
Open only to communication studies majors and minors.

COMM 496 - Directed Study in Communication Studies (1 TO 3)
Students with areas in the Department of Communication Studies pursue a specific subject in-depth in consultation with a member of the faculty.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

CPSY - COUNSELING PSYCH
CPSY 110 - Career and Life Planning (2)
Focuses on helping people make career and life plans. A series of such techniques as role playing, psychodrama, sociodrama, values clarification, and decision making are used to help students examine interrelated value systems associated with education, work, leisure, and self-expression.
Not open to juniors and seniors except by permission of the department chairperson.

CPSY 230 - Human Relationship Development (3)
An introduction to the basic psychological principles and techniques of enhancing relationships with self and others. Emphasizes understanding self-limiting behavior, self-understanding, and skill development and knowledge in the dynamics of interaction with others.

CPSY 360 - Interrelational Aspects of Sexuality (3)
Emphasizes the psychological aspects of human sexuality, especially in relation to emotions, attitudes, and values. Stresses the psychological importance of responsibility for self in sexuality. Considers the psychological aspects of human sexual development, adjustment, dysfunction, and remediation. Designed to increase students' understanding and acceptance of their own sexuality and that of others.

CPSY 400 - Fundamentals of Counseling (3)
Introduces the principles, purposes, and nature of counseling, including a review of basic counseling theories and the history of counseling, an exposure to research, and a discussion of issues in the practice of counseling.

CPSY 420 - Techniques of Psychological Interventions (3)
Basic psychological principles and techniques of counseling. Intended as an exploratory didactic and experiential course for students planning to do graduate work in counseling and related areas or for those in other fields requiring skills in interviewing.
CPSY 470 - Introduction to Cross-Cultural Counseling (3)
Opportunity to build expertise in counseling people of African-American, Hispanic, Asian, and American Indian heritage. Emphasizes understanding the social and political bases of counseling and therapy.

CPSY 490 - Issues in Counseling (1 TO 6)
Intensive study in selected areas of student need and interest in counseling. Opportunity for students to choose particular areas for in-depth study under faculty supervision.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

CS - COMPUTER SCIENCE

CS 101 - Introduction to Programming (1)
Introduction to programming. Emphasis on developing problem-solving skills and programming techniques. Topics include control structures, procedural abstraction, and introductory linear data structures.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

CS 104 - Introduction to Computers (3)
Introduction to the microcomputer as a word processing, spreadsheet, database, and communications tool. Intended for those in other disciplines. Hardware and software trends, opportunities, and responsibilities in computing are discussed. Lecture and laboratory. Core Transfer Library: Physical Sciences (IPS 1740)
Not open to students who have credit in ISOM 125.
Open only to BGS students, speech pathology majors, or radiography associate degree.

CS 105 - Multimedia Programming (1)
Introduction to end-user multimedia programming for Internet deployment. Includes laboratory use of common software tools, such as Flash and ActionScript, for creation, manipulation, and network transfer of multimedia content.

CS 106 - Digital Imaging for the Web (1)
Understanding multimedia compression algorithms and storage formats, such as JPEG, PNG, TIFF, and BMP, and their applications to the Web. Includes laboratory use of common software tools such as Photoshop and Dreamweaver for creation, manipulation, and network transfer of graphics and Web pages.

CS 107 - Personal Computing (1)
Topics include home networking, hardware and software trends, digital media, storage formats such as MP3 and MPEG4, ubiquitous computing, ethics, digital rights management, and personal entertainment devices. Includes laboratory use of common tools and devices.

CS 110 - Introduction to Computer Science and Web Programming (3)
An introduction to Web programming utilizing HTML and a Web programming language. A broad survey of computer science including its history, applications, programming languages, and computer architecture.

CS 120 - Computer Science 1: Programming Fundamentals (4)
Introduction to programming through media computing. Learn basic programming techniques while manipulating image and audio data at the pixel and sound sample level. Topics include control structures, built-in data structures, simple sorting and searching, and procedural abstraction. Required open-lab and closed-lab assignments bring theory to practice.
Prerequisite: MATH 108; MATH 111 or MATH 112 or MATH 132 or MATH 161 or MATH 165 or SAT Math score of 550 or ACT Math score of 22 or ALEKS math placement score of 46.

CS 121 - Computer Science 2: Data Structures and Objects (4)
Continuation of Computer Science 1. Strong emphasis on object-oriented paradigm and related problem-solving skills. Topics include recursion, dynamic data structures and related algorithms, efficient sorting and searching, file processing, and reusing standard libraries and packages in chosen object-oriented environment. Open-lab and closed-lab assignments are required.
Prerequisite: CS 120.

CS 124 - Discrete Structures (3)
Introduction to topics in discrete structures for computer science majors. Topics include propositional and predicate logic, sets, induction, recursion, functions, combinations, permutations, and Boolean algebra. Applications of these topics to computer science are discussed.
Prerequisite or parallel: CS 120.

CS 150 - Introduction to Teaching Computer Science in Secondary Schools (3)
An introduction to the process of becoming a Computer Science teacher in secondary schools. Through coursework and targeted clinical experiences, teacher candidates will begin to form their professional identities as future
educators, develop a beginning knowledge base for teaching, and engage with the integration of technology throughout the learning process. They will also observe, develop, and demonstrate initial core teaching practices. Prerequisite: CS 120 with a C- or better.

**CS 200 - Computers and Society (3)**
Introduction to relationship between computers, the Internet, and the laws regulating them, including the U.S. Constitution, intellectual property law, fair use, and privacy rights. Encryption technologies and its application to privacy, authentication, and digital rights management are central to these issues. Includes significant reading and writing assignments.

**CS 203 - Introduction to Computer Security (3)**
Introduction to network infrastructure, security threats, organization of file systems, encryption and decryption algorithms, authentication algorithms, programming and deployment of firewalls, intrusion detection systems, and virtual private networks, forensics, malicious software, and system administration.
Prerequisite: CS 110 or 120.

**CS 222 - Advanced Programming (3)**
Project-intensive study of advanced topics and best practices in software development, including advanced language features, modular decomposition, and development tools.
Prerequisite: CS 121 with a C- or better and either CS 124 or MATH 215 with a C- or better.
Prerequisite or parallel: ENG 104 or ENG 114 or equivalent (e.g., testing or placement).
Open only to students in majors, minors, certificate programs, and graduate students of the Department of Computer Science.

**CS 224 - Design and Analysis of Algorithms (3)**
Introduction to algorithm analysis, including probabilistic, geometric, combinatorial, and graph algorithms.
Prerequisite: CS 121 with a C- or better and either CS 124 or MATH 215 with a C- or better.
Open only to students in majors, minors, certificate programs, and graduate students of the Department of Computer Science.

**CS 230 - Computer Organization and Architecture (3)**
Exploration of computer organization and architecture. Topics include: computers’ functional components and their characteristics, performance, and interactions; instruction set architectures; and system architecture.
Prerequisite: CS 121 and either CS 124 or MATH 215.

**CS 239 - Social and Professional Issues (1)**
Discussion of social and professional issues in computer science.
Prerequisite: CS 222 with a C- or better grade.

**CS 249 - Forensics (3)**
Introduction to digital forensics as applied to gathering evidence of inappropriate behavior on a computer. Includes an examination of prominent file system architectures and search algorithm techniques, physical characteristics of magnetic media, secure deletion methodologies, and cryptology.
Prerequisite: CS 203.

**CS 269 - Service Learning (1 TO 3)**
Professional or volunteer work experience in computing. Students must submit a project plan and obtain supervisor approval before registering. Requires verification of project completion. Offered credit/no credit only.
Prerequisite: one of CS 110, 120; permission of the department chairperson.
A total of 3 credits may be earned.

**CS 299 - Experimental/Developmental Topics (3 TO 6)**
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

**CS 315 - Game Programming (3)**
Serves as an introduction to game programming, and topics include active and passive rendering, sprite animation, collision detection, audio playback, input devices, deployment, and applications of artificial intelligence.
Prerequisite: CS 222 with a C- or better grade.

**CS 369 - Professional Experience 1 (1 TO 3)**
Professional or volunteer work experience in computing. Students must submit a project plan and obtain supervisor approval before registering. Requires verification of project completion. Offered credit/no credit only.
Prerequisite: CS 222 with C- or better grade and permission of the department chairperson.
A total of 3 credits may be earned.

**CS 370 - Professional Experience 2 (1 TO 6)**
Professional or volunteer work experience in computing. Students must submit a project plan and obtain supervisor approval before registering. Requires verification of project completion. Offered credit/no credit only. Note:
CS 317
Unlike CS 369, this course does not count as an elective on the computer science major program.
Prerequisite: permission of the department chairperson.
Parallel: CS 369.
A total of 6 credits may be earned.

CS 380 - Theory of Computation 1 (3)
Mathematical logic; alphabets and languages; finite automata, regular and nonregular languages, Kleene's theorem; regular grammars; pushdown automata and context-free grammars; Turing and Post machines; recursive and recursively enumerable languages; the Chomsky Hierarchy.
Prerequisite: CS 224 with a C- or better grade.

CS 393 - Teaching Computer Science in Middle Schools (3)
Introduction to national and state computer science standards, curricular materials, instructional materials and methods, and assessment related to topics taught in middle school computer science.
Prerequisite: CS 150 with a C or better and CS 222, 224, and 230, each with a C- or better; minimum grade-point average of 2.5 in all computer science courses that are to be applied to the major; admittance to teacher education, and permission to enroll in 300/400-level education courses. Parallel: EDJH 385.

CS 395 - Teaching Computer Science in Secondary Schools (3)
Introduction to national and state computer science standards, curricular materials, instructional materials and methods, and assessment related to topics taught in secondary school computer science.
Prerequisite: CS 393 with a C or better; minimum GPA of 2.5 in all CS courses to be applied to the major; admittance to teacher education program and admittance to enroll in 300/400-level education courses.
Parallel: EDSE 380.

CS 410 - Web Programming (3)
Advanced HTML, including XHTML, Cascading Style Sheets, Java Script and Dynamic HTML. XML including DTDs and XSL. Server side programming, security issues, and encryption-based security mechanisms.
Prerequisite: CS 121 with a C- or better grade.

CS 411 - Mobile Application Development (3)
Mobile application development using current technologies. Topics include use of mobile device API, responsive design, location aware applications, hardware sensor applications, resource management, and multimedia applications.
Prerequisite: CS 121 with a C- or better.

CS 416 - Computer Networks (3)
This course covers various networks such as Internet, WiFi and Ethernet. The focus is on TCP/IP network layers and protocols such as physical layer, data link protocol, media access control, routing, transport and application, and network security.
Prerequisite: CS 224 with a C- or better grade.
Not open to students who have credit in CS 327.

CS 418 - Database Design (3)
An introduction to database requirements analysis, modeling, creation, and usage. Topics include ER model, relational model, relational algebra, SQL, dependencies and normal forms, indexes, views, sequences, web-based client-server applications development, ETL, procedural language, database security, and NoSQL.
Prerequisite: CS 222 with a C- or better grade.

CS 419 - Operating Systems (3)
Investigation on the functions and structure of computer operating systems, processors, and memory. Topics include operating systems principles, process control, concurrency, memory management, scheduling, and security.
Prerequisite: CS 222 and CS 230, both with a C- or better grade.

CS 420 - Multitier Web Architectures (3)
Topics include n-tier architectures, data access and application logic layers, Web services, scalability, advanced XML, service-oriented architectures, object access protocols, and Web site administration and security.
Projects will be used to reinforce concepts.
Prerequisite: CS 222 with a C- or better grade, and either CS 410 or CS 411 with a C- or better grade.

CS 421 - Data Analytics (3)
Introduction to data acquisition, transformation, manipulation, and visualization on large-scale structured and unstructured data. Discussion of basic data analytics methods and algorithms. Application of data analytics in business, web, social networks, and science domains.
Prerequisite: CS 121 with a C- or better.

CS 431 - Programming Languages (3)
Study of principles of programming languages. Emphasizes language paradigms and important features, structures, characteristics, and formal syntax of modern
high-level programming languages. Examples of languages in each paradigm will be studied.
Prerequisite: CS 222 and CS 230, both with a C- or better grade.
Not open to students who have credit in CS 335.

CS 439 - Current Topics Seminar in Computer Science (3 TO 6)
In-depth study of a topic taught in a seminar format.
Topics will be posted in the department before registration.
Prerequisite: CS 222 with C- or better grade and permission of the instructor.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to juniors and seniors.

CS 445 - Human-Computer Interaction (3)
Investigation into the principles and practice of user interface design, evaluation, and implementation. Topics include user-centered design, graphical user interface programming, evaluation methods, and software architectures.
Prerequisite: CS 222 with a C- or better grade.

CS 446 - System Administration (3)
Covers the setup and administration of a production-quality Unix/Linux server, suitable for web/mail hosting, shared shell hosting. Topics include general Unix proficiency, the Internet infrastructure, and system administration essentials. Lecture/lab course targeted towards students from various majors, either with some prior Unix/Linux experience or an eager ability to learn new things quickly. No prior Unix/Linux experience is assumed. Provides a foundational understanding of Unix/Linux and instruction on configuring Unix/Linux to be used as servers for file sharing, user management, web and email hosting.
Prerequisite: CS 300 or CS 416 or CT 210 or CIS 317 with a C- or better.

CS 447 - Network Security (3)
Topics include encryption, decryption, protocols, viruses, network security, authentication, legal and ethical issues, and security in operating systems, databases, e-commerce, Internet, wireless. Algorithms, protocols and applications such as RSA, DES, SSL, Firewalls, Digital Signatures, VPNs and emerging topics will be explored.
Prerequisite: CS 416 or CT 210 or CIS 317 with a C- or better.

CS 455 - Data Mining (3)
Introduction to data mining algorithms, implementations, and applications. Topics include data preprocessing, clustering analysis, data classification, mining association rules, complex data mining, Web mining, and new applications in data mining.
Prerequisite: CS 222 with a C- or better grade.

CS 456 - Image Processing (3)
Project based, dealing with the basic principles of digital image processing and computer vision. Topics: digital image formats, geometric operations on digital images, filtering, histogramming, binarization of grayscale images, labeling binary images, perimeter and area determination, thinning operations, object recognition using global features, edge detection processes, and other topics as time permits.
Prerequisite: CS 222 with a C- or better grade.

CS 490 - Software Production Studio (3 TO 6)
Work with a multidisciplinary team to create an original software product. Students will use an iterative, incremental, user-centered approach to design, develop, test, and deploy their work. This course is open to all majors but is offered by permission only to ensure each team has a practical balance of skills and interests; contact the department for the next planned offering and application instructions.
Prerequisite: permission of the instructor.
A total of 6 credits may be earned.

CS 495 - Software Engineering 1 (3)
Introduction to software engineering: process, requirements, design, quality assurance, project management, and tools. Capstone project for the computer science major. Teams work on year-long immersive projects and perform all software development tasks in cooperation with a client partner. To be taken in the last full academic year before graduation.
Prerequisite: CS 222 with a C- or better grade; COMM 210; and permission of the department chairperson.

CS 498 - Software Engineering 2 (3)
Continuation of CS 495. Must be taken in the semester following CS 495. Involves a senior capstone project with an external client partner.
Prerequisite: CS 495.
Open only to computer science majors.

CS 499 - Independent Study (1 TO 6)
Special advanced studies of computer science topics not taught in other courses.
COURSES

A total of 6 credits may be earned. Open only to juniors and seniors.

CSHU - SCI & HUM

CSHU 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the college mission. Course titles will be announced before each semester.
Prerequisite: permission of the instructor.
A total of 6 credits may be earned.

CSHU 499X - Experimental/Developmental Topics (1 TO 12)
Topics that engage advanced students in immersive, experiential, interdisciplinary, community-based, international, and/or service learning experiences. Courses may be team-taught between departments and colleges.
Prerequisite: junior or senior standing, and permission of the instructor or the dean.
A total of 12 credits may be earned.

CT - COMPUTER TECHNOLOGY

CT 111 - Microcomputer Assembly and Troubleshooting (3)
Covers various aspects of PC technology and troubleshooting. Through lecture and lab, students will gain an understanding of the design, installation and maintenance of PC hardware, software, operating systems, and network connectivity.

CT 210 - Fundamentals of Network Design (3)
Data networks are a fundamental aspect of most organizations. In this course, the core concepts, theories, and practices of network design and implementation will be addressed. These will be reinforced through hands-on projects and case study.
Open only to sophomores, juniors, and seniors.

CT 211 - System Administration Fundamentals (3)
Introduction to the fundamentals of system administration in a client-server environment. Focus on the management of resources on prevailing network operating systems.
Prerequisite: minimum grade of C- in CT 111.

CT 221 - Alternative PC Operating Systems (3)
Comparative analysis of current and emerging PC operating systems. In addition to exploring the relative strengths and weaknesses of alternative PC operating systems such as Linux and Macintosh, the installation, maintenance, and troubleshooting of these operating systems will be explored through hands-on labs.

Prerequisite: minimum grade of C- in CT 111.

CT 264 - Fundamentals of Defensive Security (3)
This course will introduce the concepts, practices, and technologies used to maintain the confidentiality, integrity, and availability of the organizational resources accessed through information technologies. Topics may include computer network defense; network security threats, vulnerabilities, and attacks; network security controls, protocols, and devices; network security policy, design, and implementation; physical security; host security; secure firewall configuration and management; and wireless network defense.
Prerequisite: minimum grade of C in CS 203.

CT 265 - Fundamentals of Offensive Security (3)
This course will introduce the concepts, practices, and technologies used to gauge the vulnerability of an organization’s information technology infrastructure. Topics will include ethics, information gathering, scanning, vulnerability assessment, enumeration, system hacking, escalation of privileges, and backdoors.
Prerequisite: minimum grade of C in CS 203.

CT 270 - Computer and Industrial Electronics (3)
Theory and application of electronics in computer technology industry. Includes fundamentals of electricity, DC circuits, introduction to semiconductor devices, microcontrollers, and integrated circuits. Work includes the use of test meters, power supplies, breadboards, and circuit simulation software.

CT 299X - Special Topics in Computer Technology (1 TO 6)
Special topics relevant to the computer technology field. Course titles will be announced before each semester.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

CT 300 - Sustainability in Information Technology (3)
A study of sustainability issues related to the field of information technology. Explores the environmental, economic, and human impact of information technology.
Prerequisite: sophomore standing.

CT 310 - Internetwork Design and Administration (3)
Intermediate course in network design and administration. Topics may include layer-2 switching concepts, intermediate IP addressing strategies, and wide area network (WAN) protocols. The application of concept and theory is achieved through labs and case projects.
Prerequisite: minimum grade of C- in CT 210.
CT 311 - Infrastructure Services (3)
A study of the infrastructure services in a network operating system that are required for basic functionality of a networked environment. Topics may include the design, implementation, security, and troubleshooting of infrastructure services such as DNS, DHCP, NAT, and others.
Prerequisite: minimum grade of C- in CT 311.

CT 321 - Alternative Server Operating Systems (3)
Comparative analysis of current and emerging server operating systems. In addition to exploring the relative strengths and weaknesses of alternative server operating systems, the installation, maintenance, and troubleshooting of these operating systems will be explored through hands-on labs.
Prerequisite: CT 211 and 221.

CT 330 - Internetwork Switching, Design, and Administration (3)
A detailed study of switching technology in a networked environment. Topics may include multilayered switching, multicast, Spanning Tree, trunking, and VLAN.
Prerequisite: minimum grade of C- in CT 310.

CT 340 - Wireless Network Communications (3)
A study of current and emerging wireless technologies and their integration into the design and implementation of networks. Topics include fundamental wireless communication concepts, wireless local area networks (WLAN), and their impact on organization communications.
Prerequisite: minimum grade of C- in CT 210.
Prerequisite or parallel: CT 310.

CT 363 - Intrusion Detection, Prevention, and Response (3)
This course will explore concepts, practices, and technologies used to address cyber intrusions. Topics may include network traffic monitoring and analysis; network risk and vulnerability management; intrusion detection systems, intrusion prevention systems, and network incident response and management.
Prerequisite: minimum grade of C in CT 264 and 265.

CT 371 - Voice Over Internet Protocol Networking (3)
Focuses on the hardware and infrastructure need for VoIP (VoIP) network systems. Extensive use of voice-enabled network routers, IP telephones, POE switches, and other supporting network equipment is included. Students will configure both small (local office) and large (multi location) VoIP systems.
Prerequisite: minimum grade of C- in CT 310.

CT 380 - Electronic Communications Administration (3)
A study of electronic communications methodologies in an enterprise network. Topics may include e-mail and groupware systems administration. Design, selection, installation, and management of these systems will be emphasized.
Prerequisite: minimum grade of C- in CT 311.

CT 385 - Internship in Computer Technology (1 TO 3)
Students will work with practicing professionals in computer technology related businesses on a variety of projects. Paid internships are highly recommended but unpaid are acceptable. Internship applications must be approved before permission is given to enroll in the course.
Prerequisite: special permission required.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to computer technology majors.

CT 410 - Scalable Internetworking (3)
A study of advanced network design issues for the large to enterprise level network. Topics may include advanced routing (OSPF, IS-IS, BGP) and advanced IP addressing (IPv6).
Prerequisite: minimum grade of C- in CT 310.
Open only to juniors or seniors.

CT 421 - Data Storage and Disaster Recovery (3)
A study of the strategies for data storage and recovery. Topics may include SAN, NAS, and disaster recovery methodologies.
Prerequisite: minimum grade of C- in CT 311.

CT 430 - Convergent Network Systems (3)
A study of the convergence of services on enterprise networks. With the convergence of voice, video, and data networks, current and emerging concepts, technologies, and practices that facilitate a unified communication network will be emphasized.
Prerequisite: minimum grade of C- in CT 310 and 311.

CT 440 - Directory Services (3)
A study of directory services and their impact on organizations. Topics will include how directory services can be designed, implemented, secured, and maintained in
an enterprise network to achieve a centralized authentication and resource management strategy. Prerequisite: minimum grade of C- in CT 311.

CT 450 - Enterprise Infrastructure Design (3)
Students will explore the requirements for establishing an enterprise level information technology infrastructure. Included will be an in-depth study of datacenter design. Prerequisite: minimum grade of C- in both CT 310 and 311.
Open only to juniors or seniors.

CT 464 - Industrial Network Security (3)
This course will introduce the concepts, practices, and technologies used to maintain the integrity of industrial control systems (ICS). Topics may include PLC and HMI configuration; types of ICS systems; physical security; ICS network architecture; ICS attack surfaces; defensive policies, procedures, and technologies; and governance and incident handling. Prerequisite: minimum grade of C in CT 264 and 265.

CT 465 - Enterprise Security Administration (3)
Focuses on the enterprise level administration of an organization’s information security. Topics may include the following: asset security; security engineering; identity and access management; security assessment and testing; and security options. Prerequisite: CT 210 and CT 221.

CT 466 - Capstone in Computer Technology (3)
Students will be engaged in immersive learning experiences integrating and applying the knowledge, skills, and abilities developed throughout the computer technology curriculum. Open only to computer technology major seniors or juniors with permission.

CT 499 - Problems in Computer Technology (1 TO 3)
Individual advanced study and experimentation in computer technology. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.

DANA - DATA ANALYTICS
DANC - DANCE

DANC 100 - Introduction to Dance History (3)
A University Core Curriculum course offering an extensive introduction to the understanding and appreciation of the many facets of creativity in dance through a variety of activities, including viewing, movement experiences, and discussing dance forms from primitive through contemporary times, and the historical and social elements that helped to shape these forms.

DANC 110 - Introduction to Ballet 1 (1)
Introduction to the fundamentals of classical ballet technique and theory at the beginning level. Emphasis is placed on alignment, coordination, musicality, and performance skills. Barre work, adagio, pirouettes, jumps, connecting movements, and centre combinations will be introduced. The history and terminology of ballet are also introduced. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 111 - Introduction to Ballet 2 (1)
Continuation of the study of classical ballet technique and theory at the advanced beginning level. Continued emphasis is placed on alignment, coordination, musicality, and performance skills. Barre work, adagio, pirouettes, jumps, connecting movements, and centre combinations will be expanded upon, as will the history and terminology of ballet. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 120 - Introduction to Modern 1 (1)
Introduction to the fundamentals of modern dance technique and theory at a beginning level. Emphasis is placed on alignment, phrasing, body awareness through space, vocabulary, musicality, and performance skills. Various modern dance techniques are introduced and explored and include floor work, center, and traveling combinations. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 121 - Introduction to Modern 2 (1)
Continuation of the study of modern dance techniques and theory at an advanced beginning level. Continued emphasis is placed on alignment, phrasing, body awareness through space, vocabulary, musicality, and performance skills. Various modern dance techniques are explored in more depth, and include floor work, center, and traveling combinations. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned, but no more than 1 in any one semester or term.
DANC 130 - Introduction to Jazz 1 (1)
An introduction to jazz dance technique and theatre movement for the non-dancer. Emphasis is placed on the study of various jazz styles and philosophies, for example the Luigi technique. These can be used for theatre dance or athletic warm ups and can be applied to all learning and performance situations.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 131 - Introduction to Jazz 2 (1)
A continuation of the study of jazz dance technique and theory at the advanced beginning level for students with some previous dance training or practical experience through performance. Emphasis is placed on expanding the jazz dancer's movement and performance vocabulary through warm ups, progressions, and combination work.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 132 - Introduction to Tap 1 (1)
An introduction to tap dance technique and theory at the beginning level. Emphasis is placed on rhythmic structure in conjunction with tap technique fundamentals and vocabulary. The history of tap dance as an American vernacular form is studied, paying attention to its practice in musical theatre and concert formats.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 200 - The Dancer's Body (2)
An introduction to the basic knowledge of the human body in specific relation to dance, including studies of the musculoskeletal systems, nervous system, and kinesiology, as well as common dancer pathologies, injury prevention, and body maintenance. Additional topics may include the function of anatomical structures of the human body, the biomechanical principles of these structures and the integration of these systems.
Prerequisite: permission of the department chairperson.

DANC 210 - Ballet 1 (2)
Basic principles of classical ballet technique and theory at the intermediate level. Execution and terminology will be taught with knowledge of history and the art of ballet. Emphasis is placed on alignment, musicality, and timing. Center technique with combinations of port de bras, adagio, pirouettes, petit allegro, and grande allegro.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 211 - Ballet 2 (2)
Continuation of intermediate ballet technique and theory with more complex combinations. Pointe work is presented with emphasis on correct positions and exercises to strengthen the feet and legs. Includes practical experience in developing barre and center combinations.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 220 - Modern 1 (2)
Introduction to modern dance technique and theory at the intermediate level. Emphasis on core support, alignment, and use of weight and breath. Personal expression, use of imagery, kinetic and spatial awareness are also examined.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 221 - Modern 2 (2)
Continuing development of intermediate/advanced modern technique and theory. Emphasis on use of imagery, dynamics, and practice of a higher sense of personal expression with the introduction of more advanced movement combinations and technique.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 230 - Jazz 1 (2)
A study of jazz dance technique and theory at the intermediate level. Emphasis is placed on the development of flexibility, strength, placement, and rhythm through the use of movement phrases and progressions, directional changes, turns and leaps. Students will develop an appreciation for the history and lineage of jazz dance.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 231 - Jazz 2 (2)
A continuing study of jazz dance technique and theory at the advanced intermediate level. Emphasis is placed on further development of flexibility, strength, placement, line, and rhythm. Additional movement phrases, progressions, complex directional changes, and turns and leaps. Students will continue to study the history and lineage of jazz dance.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

**DANC 232 - Tap 1 (1)**
A continuing study of tap technique and theory at the intermediate level. Emphasizes the development of more complex rhythms, increasing tempos, and expanded vocabulary. Added emphasis is placed on simple progressions, articulation of sounds, and artistic expression and performance. Expanded historical study of tap dance and its major contributors.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

**DANC 240 - World Studio 1 (1)**
A survey of the unique movement styles found in world and ethnic dance. Styles covered will vary each semester and may include the traditional dances and historical background of Eastern and Western Europe, the Middle East, and parts of Asia.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

**DANC 241 - World Studio 2 (1)**
A survey of the unique movement styles found in world and ethnic dance. Styles covered will vary each semester and may include the traditional dances of the Americas and parts of Africa.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

**DANC 280 - Musical Theatre Dance 1 (2)**
Survey of historical musical theatre dance and related social dances influencing Broadway stage choreography from c. 1900 to the present. Emphasizes origins of early musical comedy through minstrelsy, burlesque, vaudeville, and musical revue extravaganzas, and the practical use of these movement techniques.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

**DANC 281 - Musical Theatre Dance 2 (2)**
Intermediate to advanced level study of dance forms from the Broadway and nightclub stage and their historical origins. Emphasizes technique using styles and repertoire of contemporary choreographers who have made major contributions to the art of musical theatre dance.
Prerequisite: permission of the department chairperson.

A total of 6 credits may be earned, but no more than 2 in any one semester or term.

**DANC 287 - Improvisation (2)**
The exploration of dance elements through guided motion studies and spontaneous movement. Participants will work with, define, and discuss principles of dance such as space, time, shape, and force. Focus on student response to specific kinesthetic problems as individuals and in small to large group interactions.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

**DANC 289 - Student-Directed Dance Performance (1)**
This course provides students with a practical performance experience as part of the student directed production series.
Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned, but no more than 1 in any one semester or term.

**DANC 299X - Experimental/Developmental Topics (0 TO 12)**
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 12 credits may be earned.

**DANC 300 - Body Conditioning and Maintenance (2)**
A specialized study of specific body therapies utilized to preserve, protect, and maintain a dancer’s instrument. This course may include Pilates, yoga, proprioceptive neuromuscular facilitation techniques, relaxation techniques, somatic practices, massage techniques, diet and wellness.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

**DANC 301 - Dance History 1 (3)**
The study of early dance forms to 1900. Discussion and research will reflect the culture and societal attitudes of the time period and the relationship with dance and the other arts.
Prerequisite: permission of the department chairperson.

**DANC 302 - Dance History 2 (3)**
The study of early dance forms to 1900. Discussion and research will reflect the culture and societal attitudes of the time period and the relationship with dance and the other arts.
Prerequisite: permission of the department chairperson.
DANC 310 - Ballet 3 (2)
Intermediate/advanced ballet technique and theory. Emphasis on performance and teaching. Pointe work exercises are notated to develop strength, speed, and control.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 315 - Technique Studio (1)
A specialized study of specific movement techniques and/or topics. Techniques and/or topics covered may include repertory, variations, partnering, pointe, and men's ballet.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 320 - Modern 3 (2)
Introduction to modern dance technique and theory at the advanced level. Trains the student to achieve higher technical proficiency while emphasizing clarity, body awareness, personal style, and the greater potential of movement in space.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 330 - Jazz 3 (2)
A study of jazz dance technique and theory at an advanced level. Emphasis is placed on technical precision, increased complexity of turns and leaps, musicality, performance artistry, and stylistic execution.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

DANC 332 - Tap 2 (1)
Study of tap technique and theory at the advanced level. Continued development of ability to pick up and retain extended phrases, and execute advanced progressions incorporating turns and complex rhythm patterns. Added emphasis is placed on creative expression through the use of improvisation and other tap techniques.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

DANC 380 - Dance Production (2)
Designed to acquaint students with the major technical elements (sound and lighting), and the management skills involved in the production of dance performance.
Prerequisite: permission of the department chairperson.

DANC 387 - Choreography 1 (2)
Guided creative process to develop choreography using improvisation and basic elements of dance. Students explore and develop studies using time, space, energy, rhythm, and design. Emphasizes solo work and small group structures developing a personal voice. Students participate in analyzing and critiquing dance through performance, written assignments, discussions, and journals.
Prerequisite: permission of the department chairperson.

DANC 389 - Studio Dance Performance (1)
This course provides students with a practical performance experience as part of the faculty and/or guest artist directed studio production series.
Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned, but no more than 1 in any one semester or term.

DANC 401 - Advanced Topics in Dance Studies (3)
Engage students in current trends and issues within the field of dance studies. Informed by race studies, gender studies, disability studies, economics, and politics as students explore the intersections of these topics with global contemporary dance. A space for praxis, as students write and move in response to readings, discussions, and film viewings. Additionally will delve into the writing of dance, repositioning and rehearsing writing as a means of choreographing ideas.
Prerequisite: permission of the department chairperson. Open only to theatre and dance majors.

DANC 410 - Ballet 4 (2)
Advanced ballet, pointe technique, and theory. Emphasis is placed on performance skills in classical ballet. Barre and centre are performed on pointe at this level.
Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned, but no more than 2 in any one semester or term.

DANC 420 - Modern 4 (2)
Development of modern dance technique, theory, and personal artistry at the advanced level. Approaches to achieving a greater sense of self and kinetic experiences will be explored with added emphasis on theory and/or
philosophies of modern dance technicians and choreographers.
Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned, but no more than 2 in any one semester or term.

DANC 430 - Jazz 4 (2)
A continuing study of jazz dance technique at the advanced level. Emphasis is placed on technical precision, increased complexity of turns and leaps, musicality, performance artistry, and stylistic execution.
Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned, but no more than 2 in any one semester or term.

DANC 487 - Choreography 2 (2)
A continuation of the exploration of choreographic theories and processes from Choreography 1. Emphasis is on group structures from duets to quintets. Students will participate in analyzing and critiquing dances through research, written assignments, discussions, and journals.
Prerequisite: permission of the department chairperson.
A total of 4 credits may be earned, but no more than 2 in any one semester or term.

DANC 488 - Dance Pedagogy (3)
Teaching methods applied to ballet, modern, jazz, and creative movement. Class explores methods of teaching dance from preschool through adults in private studios, public schools, and higher education. Observation of master teachers, supervised teaching experiences, evaluations, critiques of teaching skills, development of lesson plans, self assessment, and teaching philosophies required.
Prerequisite: permission of the department chairperson.

DANC 489 - Mainstage Dance Performance (1)
This course provides students with a practical dance performance experience as part of the faculty and/or guest artist directed mainstage production series.
Prerequisite: permission of the department chairperson.
A total of 7 credits may be earned, but no more than 1 in any one semester or term.

DANC 490 - Creative Project (2)
Designed as a project in choreography for advanced dance students.
Prerequisite: DANC 287 and DANC 387 or permission of the department chairperson.
A total of 6 credits may be earned, but not more than 2 in any one semester or term.

DANC 496 - Senior Thesis (1 TO 3)
Creation of a dance concert or the presentation of research on a specific topic related to dance. Requirements include a faculty advisor and all elements related to the performance or presentation.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

ECON 116 - Survey of Economic Ideas (3)
The important conclusions of economics are surveyed and applied to topics chosen by the instructor. Especially valuable to students with no high school background in economics. Not applicable to a major or minor in economics. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1040).
Not open to students who have credit in ECON 201 or 202.

ECON 201 - Elementary Microeconomics (3)
A study of why people specialize as producers and exchange what they produce with others. Includes analysis of how market structure affects prices. Discusses the issue of whether self-interested economic behavior promotes or hinders society. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1042).

ECON 202 - Elementary Macroeconomics (3)
Survey of the major explanations for fluctuations in general business conditions. Focuses on how the private sector's economic behavior is affected by various governmental policies and institutions. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1041).
Prerequisite: C or better grade in ECON 201.

ECON 221 - Business Statistics (3)
Introduction to various statistical and probabilistic concepts and techniques with application to business problems including random variables and probability distributions, measures of central tendency and dispersion, testing of hypotheses, simple linear regression, and correlation.
Prerequisite: C or better grade in MATH 111, or a passing grade (D- or better) in MATH 132, MATH 161, MATH 162, MATH 165, or MATH 166 and a C or higher grade in ISOM 125.

ECON 247 - Economics and Statistics in the Media (3)
Provides communications and journalism majors with skills in applying and intuitively understanding statistical and economic concepts. Students will be expected to use these concepts in developing news and feature stories.
ECON 279 - Economic and Political Problems of Emerging Nations (3)
A survey of historical and contemporary problems of the less-developed nations. Conditions contributing to economic, political, and social change. Problems of economic development policies and programs within the institutional structure. Internal and external pressures that influence patterns of development. Not open to students who have credit in POLS 281.

ECON 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

ECON 301 - Intermediate Microeconomics (3)
An investigation of the ways in which economic units direct resources into production. Involves analyses of product pricing, output determination, resource pricing, and employment in various market structures. Includes graphical and, in some instances, simple algebraic analyses. Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

ECON 302 - Intermediate Macroeconomics (3)
Analyzes national income as a measure of economic activity. Emphasizes the determination of national income, employment, and price level and the rate of growth of the economic system. Includes examination of the theories of consumption and investment spending, interaction between money and national income, and implications of alternative models for public policy. Includes graphical and, in some instances, simple algebraic analyses. Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

ECON 309 - American Economic History/Development from Origins to the Civil War (3)
An economic history of America from its origins through the Civil War; topics vary, but the subjects usually covered include demography, various forms of labor institutions including slavery, colonialism, the impact of revolution and independence, developments in transport, industry and agriculture, environmental issues, and impacts of war and trade. Prerequisite: minimum grade of C in ECON 116 or ECON 201.

ECON 310 - American Economic History/Development from the Civil War to the Present (3)
An economic history of America since the Civil War; subjects usually include: the post-Civil War South, money and banking, the Great Depression and the New Deal, urbanization, diseases, demographics, the environment and ecology, developments in transport, industry and agriculture, labor, and the impact of conflicts. Prerequisite: minimum grade of C in ECON 116 or ECON 201.

ECON 311 - Environmental Economics (3)
Application of economic analysis to pollution, natural resource usage, and sustainability. "Sustainability" expands the concepts of economic growth and optimization to include a balanced set of goals that include environmental carrying capacity, social and intergenerational equity, and community values. Prerequisite: minimum grade of C in ECON 116 or ECON 201 or permission of the instructor.

ECON 321 - Advanced Business Statistics (3)
This second course in business statistics focuses on statistical techniques used in business and economics. Topics include categorical data analysis, analysis of variance, multivariate regression analysis, and distinguishing relevant from spurious correlations. Also includes communication skills for explaining statistical results to audiences without knowledge of statistics. Prerequisite: ECON 221 or equivalent or permission of the department chairperson.

ECON 330 - Sports Economics (3)
Economics affects sports players, teams, leagues and institutions. The course applies economic principles to sports and covers topics such as the organization of sports, the market for franchises, financing sports venues, ticket prices, labor relations, player drafts, athlete compensation, betting markets, cooperative, collusive and competitive strategic behaviors in sports, and anti-trust issues. Students successfully completing this course will be able to understand and apply economic principles to sports and in their own lives.

ECON 331 - Labor Economics (3)
Students learn how labor is allocated under various institutional settings. Topics include: slavery, labor unions, discrimination, comparable wage differentials, household labor supply decisions, social security, the earned income tax credit, welfare minimum wage laws, immigration, and the differing consequences of allocating labor under communism, socialism, and capitalism.
Prerequisite: minimum grade of C in ECON 116 or ECON 201.

ECON 332 - Labor Relations and Law (3)
Study of collective bargaining, the joint determination by employers and employees (through their representatives) of the problems of the employment relationship—encompassing both the negotiation and administration of the labor agreement with primary emphasis upon the rules governing these processes.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202; or permission of the department chairperson.

ECON 345 - The Economics of Government Budgets (3)
Analysis of economic theory behind alternative methods of financing government budgets and debt management. Emphasizes economic consequences of budgets by examining incidence, shifting, and incentives regarding provision of public services and alleviation of economic insecurity.
Prerequisite: minimum grade of C in ECON 201.

ECON 346 - Economic Analysis of Legal Issues (3)
Applies microeconomic analysis to legal issues such as property rights, crime, contracts, and liability rules. Strengthens the ability to engage in economic reasoning by demonstrating its applicability to law and economics.
Prerequisite: minimum grade of C in ECON 201.

ECON 347 - Economics Projects (3)
Immersive economics course where economics students normally partner with students in other disciplines to produce tangible outputs such as films, policy reports, podcasts, websites, articles, public events, and other outputs under the supervision of an economics faculty member. The projects should have a primary economics focus.
Prerequisite: ECON 116 or ECON 201 or ECON 247 or permission of the instructor.

ECON 348 - Health Economics (3)
Examines how institutions and incentives affect the health care choices people make. Topics include the demand and supply of medical care, the effects of health insurance, professional licensing, pharmaceutical regulations, and government involvement in health care.
Prerequisite: minimum grade of C or better in ECON 201 and ECON 221.

ECON 351 - International Economics (3)
Examines international trade, finance, and commercial policy.
Prerequisite: minimum grade of C in ECON 201.

ECON 369 - Internship in Economics (1 TO 6)
Under a program approved and supervised by the Department of Economics, economics majors or minors work full-time for one semester as economics interns for private or public organizations. Periodic written reports of job experiences are required.
Prerequisite: ECON 301 or ECON 302; permission of the department chairperson.
A total of 6 credits may be earned.
Open only to economics majors or minors and second-semester junior or senior standing.

ECON 370 - Industrial Organization (3)
Monopolistic, oligopolistic, and competitive market structures. Unsettled issues concerning structure and conduct of industry; concentration, vertical integration, and problems of economic regulation by the government.
Prerequisite: minimum grade of C in ECON 201.

ECON 371 - Economics Games of Strategy (3)
Explores the strategic interaction of rational decision makers. Students will be introduced to the basic concepts of game theory and explore a variety of applications. Numerous models will be explained and played in the classroom and then evaluated to further understand the nature of strategic human interaction. Advanced students will be encouraged to develop experimental models and then assisted in setting up the virtual laboratory, running the experiments, and evaluating the results.
Prerequisite: ECON 201.

ECON 380 - Economic Growth (3)
An analysis of the causes, mechanisms, and patterns of economic growth. Compares and analyzes growth rates of various countries.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

ECON 381 - Economics for Teachers: Content Issues and Pedagogy (3)
Pre-service teachers explore content and pedagogy issues related to teaching high school economics. Economic content is given by the national and state standards. Explore pre- and post-tests of student mastery of the standards. Explore economic concepts and pedagogies in lesson plans used with students.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

**ECON 390 - Honors Colloquium in Economics (1 TO 3)**
Exploration of selected issues, themes, problems, or interpretations with emphasis on individualized study and reporting.
Restricted to honors students; others by permission of the department chairperson.
A total of 3 credits may be earned.

**ECON 416 - History of Economic Doctrines (3)**
The history of how humankind has looked at its economic life, surveys the changing ways economists have rationalized, articulated, and criticized economic organization from biblical times to the present. The successive reformulations place a major emphasis on the economic doctrines of the recent past and the present.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

**ECON 421 - Mathematical Economics (3)**
Use of mathematics in the development of selected economic theories. Survey of input-output analysis and examination of the application of linear programming and the theory of games to selected economic problems.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

**ECON 424 - Introduction to Econometrics (3)**
Applied statistical methods to economics. Emphasizes constructing estimating, and testing economic models. Topics include multiple regression analysis, advanced regression techniques, time series analysis, and forecasting. Considers specific problems that arise in applying these topics and business data.
Prerequisite: grade higher than C- in ECON 201; passing grade in ECON 321 or MATH 321, or grade higher than a C- in ECON 221 or MATH 221; and passing grade in ECON 202; or permission of the department chairperson.

**ECON 441 - The Theory of Monetary Policy (3)**
A theoretical presentation of how the board of governors of the Federal Reserve System modifies the economic climate within which the institutions of the nation operate and of the problems of government finance as they relate to the board's goal of general economic stability.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

**ECON 461 - Comparative Economic Systems (3)**
Historical and comparative study of economic theories and systems.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202.

**ECON 485 - Urban Economics (3)**
The systematic economic structure of cities and the component parts of that structure. Attention is given to the ways in which the economic structure of cities and regions obstructs or facilitates the attainment of the goals of the community.
Prerequisite: minimum grade of C in ECON 201.

**ECON 492 - Readings and Directed Study in Economics (1 TO 3)**
Students will pursue their interests in specialized economics subjects under the direction of a member of the economics staff. Subjects studied will differ from or be studied in greater depth than subjects treated in other economics courses.
Prerequisite: 6 credits in economics.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ECON 495 - Seminar in Economics (1 TO 3)**
Topics center on economic problems and issues of special interest to students and instructor. Permits in-depth studies of topics not formally treated in other courses, thereby exposing interested students to a wider variety of economic problem-solving situations.
Prerequisite: ECON 201 with a minimum grade of C; ECON 202; permission of the department chairperson.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ECYF - EARLY CHILD YOUTH FAM**

**ECYF 100 - Introduction to Early Childhood, Youth, and Family Studies (3)**
Introductory course concerning the interdisciplinary nature of early childhood, youth, and family studies. Concepts include the profession’s common body of knowledge, diversity, public policy, critical and creative thinking, professional ethics, and Indiana and professional association standards. Includes discussion of career exploration, required sequence of program curriculum, internships, practicums, and/or student teaching. Includes 40 hours of mandatory service learning.
Course may be repeated only once.
Open only to early childhood licensure majors and family and child majors.
ECYF 202 - Child and Family Wellness (3)
Explore the concepts of wellness, emphasizing nutrition, health and safety as it applies to children and families. Increase awareness of the need for healthy environments and use of sustainable and age appropriate practices in environments with families and children.

ECYF 231 - Family and Community Relations (3)
Explores important and complex roles of families in the educational development of young children. Factors affecting family-child, family-community, and child-community interactions and skills are studied and related to the educational process.

ECYF 250 - Family Relations (3)
Focuses on family dynamics and interaction across a variety of family structures and backgrounds. Explores the impact of larger social systems on the family, changing concepts of family, and family processes throughout the life cycle. Emphasizes healthy interaction patterns and skills to strengthen family relationships.

ECYF 252 - Creative Experiences for Young Children (3)
Designed to develop knowledge of creative activities that are developmentally appropriate for the young child. Skill in providing creative and play experiences.

ECYF 260 - Early Childhood Curriculum and Instruction (3)
Focuses on knowledge and skills necessary to design and implement a curriculum for young children. Integrated learning, emergent curriculum, and project work are emphasized.

ECYF 265 - Infant/Toddler Development and Education (3)
Growth and development from conception through the third year of life emphasizing how children learn. Includes physical, social, emotional, and cognitive development. Students interact with and observe infants and toddlers in laboratory setting. Students implement developmental exercises and activities.

ECYF 275 - Child Development (3)
Students will study physical, cognitive, emotional, and social development of young children ages 3-8. Students will also participate in, observe, and complete assignments in a preschool laboratory setting utilizing developmentally appropriate practices.

ECYF 301 - Teaching in the Pre-Kindergarten/Kindergarten Program (3)
Planning and implementing programs for children ages three through five. Prerequisite: completion of decision point 2: admission to the teacher education program. Parallel: ECYF 381. Open only to early childhood education and dual early childhood/early childhood special education majors. Students are not permitted to register simultaneously in ECYF 301 and ECYF 351. May be repeated only once.

ECYF 310 - Promoting Prosocial Behavior in Young Children: Guidance and Cultural Factors (3)
Students will study the research-based theories and practices of developmentally appropriate guidance as applied to early care and education settings. Students will examine the relationships among family, community, and care, and will develop an understanding of anti-bias and multiculturalism as applied to child development.

ECYF 315 - Infant Toddler Curriculum and Environment (3)
Will discuss how optimum development of children ages birth to 3 is supported by age-appropriate curriculum, based on quality adult-child interactions and a well-designed physical environment in the out of home setting.

ECYF 320 - Leadership and Management in Child Development Programs (3)
Examine leadership and administrative issues that students will face in early care and education settings, including center-based programs, Head Start, and family childcare options. Prerequisite: ECYF 265 or ECYF 275 or ECYF 315.

ECYF 330 - Health and Well Being in Early Childhood Programs (3)
This course introduces students to contemporary issues related to children’s health, safety, and basic nutrition. An emphasis is placed on the promotion of children’s healthy development and well-being.

ECYF 340 - Life and Workplace Management (3)
Application of management principles to achieve life and workplace goals and responsibilities. Emphasis on use of resources, technology, effective communication, and management to diminish stress.
ECYF 345 - Culture and Language in Teaching and Learning (3)
Examines the impact of culture and language on teaching and learning. Discusses teacher behaviors, educational materials, and school practices that affect the academic success of students from diverse cultural and linguistic backgrounds.
Prerequisite: EDEL 200.

ECYF 350 - Families in Cross-Cultural Perspectives (3)
Addresses issues for professionals working with families with diverse cultural customs, beliefs, and values. Content includes the principles, processes, and key concepts involved in child rearing practices, coupling and marital processes, and general family dynamics in a cross-cultural perspective. Emphasis is on issues related to ethnic diversity, immigration, and other key concepts to consider when working with individuals and families from diverse backgrounds.
Prerequisite: ECYF 250.

ECYF 351 - Teaching in the Kindergarten/Primary Program (3)
Planning and implementing programs for children in kindergarten and primary grades.
Prerequisite: completion of decision point 2: admission to teacher education program.
Open only to early childhood education and dual early childhood/early childhood special education majors.
Students are not permitted to register simultaneously in ECYF 301 and ECYF 351.
May be repeated only once.

ECYF 380 - Parenting (3)
Research-based parenting practices supporting the positive development of children in diverse families throughout the life cycle.

ECYF 381 - Early Childhood Language Arts (3)
Introduces basic skills every young child needs to acquire in order to use oral and written language competently in society. Deals with materials, methods, principles of learning, and conditions necessary for optimum learning.
Prerequisite: completion of decision point 2; admission to the teacher education program.
Parallel: ECYF 301.
Open only to early childhood education and dual early childhood/early childhood special education majors.

ECYF 383 - Presentations, Practices and Techniques for Family Life Education (3)
Development of techniques for presentations and projects meeting the needs of diverse audiences in family and consumer sciences. Includes participation in use of methods, development, evaluation, and techniques for varied environments.
Prerequisite: ECYF 100.
Not open to teaching majors in family and consumer sciences.

ECYF 394 - Family Services Administration (3)
Introduces students to the primary skills, functions, and responsibilities associated with working in and leading nonprofit social service organizations. Structured to prepare students for professional careers working in agencies that provide services for families.

ECYF 400 - Student Teaching: Pre-Kindergarten (6 TO 12)
Capstone clinical experience in the practice and application of teaching skills with pre-kindergarten students.
Students enroll in ECYF 400 (12) or ECYF 401 (12) or ECYF 402 (12).
Offered credit/no credit only.
Prerequisite: completion of decision point 3; admission to student teaching; C or better grades in ECYF 301 and ECYF 381 and ECFY 351 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 overall grade-point average; permission of the department chairperson.
A total of 12 credits may be earned.

ECYF 401 - Student Teaching: Kindergarten (6 TO 12)
Capstone clinical experience in the practice and application of teaching skills with pre-kindergarten students.
Students enroll in ECYF 401 (12) or ECYF 400 (12) or ECYF 402 (12).
Offered credit/no credit only.
Prerequisite: completion of decision point 3; admission to student teaching; C or better grades in ECYF 301 and ECFY 381 and ECFY 351 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 overall grade-point average; permission of the department chairperson.
A total of 12 credits may be earned.

ECYF 402 - Student Teaching: Primary Grades (6 TO 12)
Capstone clinical experience in the practice and application of teaching skills with pre-kindergarten students.
Students enroll in ECYF 402 (12) or ECFY 400 (12) or ECFY 401 (12).
Offered credit/no credit only.
Prerequisite: completion of decision point 3; admission to student teaching: C or better grades in ECYF 301 and ECYF 381 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 overall grade-point average; permission of the department chairperson.
A total of 12 credits may be earned.

ECYF 425 - Grant Writing and Research Methods (3)
Focusing on the family and child disciplines, students will learn the research process, from developing research questions to analyzing data and interpreting results. Students will explore the grant writing process and methods for finding funding sources.
Prerequisite: ECYF 100 and ECYF 250.

ECYF 440 - Kindergarten Education (3)
Development of the kindergarten-primary curriculum with special emphasis on kindergarten children and procedures to be used in their development.
Prerequisite: completion of decision point 2: admission to the teacher education program.

ECYF 442 - Administration of Early Childhood Programs (3)
Activities of young children in pre-kindergarten. Organization, administration, and educational program of pre-kindergarten care.
Open only to juniors and seniors.

ECYF 465 - Advanced Child Development in Practice (3)
Faculty-guided professional experience working with young children in a developmentally appropriate early care environment. Students complete 200 hours, including attending weekly staff and monthly training meetings at the Child Study Center.
Prerequisite: ECYF 100 and ECYF 265 and ECYF 275.

ECYF 475 - Marriage (3)
Relationship dynamics and contemporary changes to the institution of marriage. Emphasizes the individual within marriage, dating, mate selection, relationship maintenance, communication, sexual adjustment, marriage dissolution, and marital growth.
Open only to juniors and seniors or by permission of the department chairperson.

ECYF 484 - Family Stressors and Crisis (3)
Focuses on stressors individuals and families experience across the life cycle and methods of coping. Teaches skills in professional ethics and boundaries when working with or educating families.
Prerequisite: ECYF 100 and ECYF 250; junior or senior standing or permission of the department chairperson.

ECYF 485 - Family Policy (3)
Explores policy at the local, state, and federal levels and its impact on family life. Students will assess the effectiveness of policies and programs from a family perspective, learn about the policy making process, and critically examine different roles professionals can play in influencing policy development.
Prerequisite: ECYF 100 and ECYF 250; permission of the department chairperson.

ECYF 492 - Professional Practices in Child Life (3)
Students will learn clinical and professional practices required to work in the child life field, including the history of the child life profession, ethics in child life, interventions, and healing environments in family-centered care.

ECYF 493 - Internship in Family and Child (3 TO 9)
Provides the opportunity for the student to work in an internship setting to gain professional experience related to their major.
Prerequisite: ECYF 315 or ECYF 393 or ECYF 465 or permission of the department chairperson. A total of 9 credits may be earned.

ECYF 497 - Independent Study in Early Childhood, Youth, and Family Studies (1 TO 6)
Independent study and research in early childhood, youth, and family studies.
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

EDAC - ED: ADULT & COMMUNITY
EDAC 101 - Seminar in Facilitating Lifelong Learning (2)
A seminar course for nontraditional students that offers an opportunity to explore, discuss, and reinforce changes in themselves as learners and group participants.
Prerequisite: permission of the department chairperson.

EDAC 299X - Experimental/Developmental Topics (0 TO 6)
Topics relevant to the discipline. Course titles to be announced before each semester.
A total of 6 credits may be earned.
EDAD - ED: ADMIN & SUPER
EDAD 486 - Legal Aspects of Education for Future Teachers (3)
Special attention will focus on legal foundations of education, rights and responsibilities of teachers (employment, tenure, fringe benefits, liability, and negotiations), and rights and responsibilities of students (attendance, discipline, and due process).

EDAL - ED: ALL GRADE
EDAL 470 - Student Teaching: All-Grade (6 TO 7)
Required for the standard license in all-grade education. Involves a full-day assignment for 10 weeks in a public elementary, junior high/middle, or secondary school. Offered credit/no credit only. Prerequisite: admission to student teaching. A total of 7 credits may be earned. Open only to all-grade teaching majors.

EDCU - EDUCATION: CURRICULM
EDCU 331 - Public School Curriculum (3)
Introduces curriculum perspectives and procedures and examines current practices and organizational structures within the context of research on cognition, human development, and pedagogy. Prerequisite: admission to teacher education program.

EDEL - EDUC: ELEMENTARY
EDEL 100 - Education in a Democratic Society (3)
Serves as an initial investigation into teaching and the teaching profession. Participation in civic activities as a way of coming to understand children and various conditions that influence the teaching profession. May be repeated only once.

EDEL 200 - Planning for the Elementary and Early Childhood Classroom (3)
Ties direct classroom experience to seminar content. Emphasizes integrating, implementing, and interpreting laboratory experiences. May be repeated only once. Prerequisite: completion of decision point 1; C or better grade in EDEL 100 or EDSE 150 or ENG 150 or FCED 150 or SPCE 201 or PEP 161 or TEDU 195 or SCI 150 or MATH 150 or MUSE 100 or FL 150 or SS 150.

EDEL 244 - Early and Elementary Education for Social Justice (3)
A broad understanding of social, economic, cultural, and linguistic diversity within the context of early and elementary education in today’s society. Prerequisite: EDEL 100 or SPCE 201 with a minimum grade of C.

EDEL 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

EDEL 300 - Management, Organization, and Instruction in the Elementary Education Classroom (3)
Departmental themes concerning teaching and learning in elementary schools will be extended. This seminar focuses on instructional methods and classroom management. Prerequisite: C or better in EDEL 200 and EDRD 204; completion of decision point 2: admission to the teacher education program. Parallel: EDRD 300. Open only to elementary education and dual elementary/special education majors. May be repeated only once.

EDEL 302 - Developing Elementary English Language Arts with Multicultural Literature (3)
Focuses on the development of reading, writing, listening, speaking, viewing, and visual representing using multicultural literature. Includes clinical experiences. May be repeated only once. Prerequisite: C or better in EDRD 204.

EDEL 304 - Teaching Writing in the Elementary Grades (3)
Focuses on theory, research methods, strategies, and program models for teaching writing in the elementary classroom; includes clinical experiences that develop reading/writing connections. May be repeated only once. Prerequisite: C or better in EDRD 204.

EDEL 311 - Language Arts Methods (3)
Modern methods and materials for teaching written and oral expression, language use, spelling, handwriting, and literature in the elementary grades. May be repeated only once. Prerequisite: C or better in EDRD 204.
EDEL 350 - Teaching in the Elementary Education Classroom (3)
Departmental themes concerning teaching and learning in elementary schools will be extended. Laboratory experience focuses on classroom instruction, organization, and management.
Prerequisite: C or better grade in EDEL 300 and EDRD 300; completion of decision point 2: admission to the teacher education program.
Parallel: EDRD 350.
Open only to elementary education and dual elementary/special education majors.
May be repeated only once.

EDEL 411 - Trends and Issues in Teaching Elementary English Language Arts (3)
Requires students to investigate in-depth a problem or issue related to the teaching of elementary English Language Arts reflecting on best practices vs. common practices in relation to the NCTE/IRA Standards for the English Language Arts.
May be repeated only once.
Prerequisite: C or better in EDRD 204.

EDEL 463 - Student Teaching: Elementary (6)
Capstone clinical experience in the practice and application of teaching skills with elementary grade children.
Students enroll simultaneously for EDEL 465 (6).
Offered credit/no credit only.
Prerequisite: completion of decision point 3: admission to student teaching; C or better grades in EDEL 300 and EDEL 350 and EDRD 400 and EDPS 393 and MATH 391 and SCI 397 and SS 397; 3.0 or better overall grade-point average; permission of the department chairperson.
Parallel: EDEL 465.
Open only to elementary education majors.

EDEL 464 - Student Teaching: Elementary (6)
Capstone clinical experience in the practice and application of teaching skills with elementary grade children.
Students enroll simultaneously for SPCE 489 (6) (Dual Elementary Education/Special Education).
Offered credit/no credit only.
Prerequisite: completion of decision point 3: admission to student teaching; C or better grades in EDEL 300 and EDEL 350 and EDRD 400 and EDPS 393 and MATH 391 and SCI 397 and SS 397; 3.0 or better overall grade-point average.
Parallel: SPCE 489.
Open only to dual elementary/special education majors.

EDEL 465 - Student Teaching: Elementary (6)
Capstone clinical experience in the practice and application of teaching skills with elementary grade children.
Students enroll simultaneously for EDEL 463 (3).
Offered credit/no credit only.
Prerequisite: completion of decision point 3: admission to student teaching; C or better grades in EDEL 300 and EDEL 350 and EDRD 400 and EDPS 393 and MATH 391 and SCI 397 and SS 397; 3.0 or better overall grade-point average; permission of the department chairperson.
Parallel: EDEL 463.
Open only to elementary education majors.

EDEL 490 - Practicum in Elementary Education (1 TO 3)
Laboratory and seminar course involving a study of progressive school practices; the philosophy of education underlying and the possibilities of using progressive practices in public schools.
A total of 3 credits may be earned.

EDEL 491 - Independent Study in Elementary Education (1 TO 6)
Independent study and research in elementary education.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

EDEL 492 - Issues in Elementary Education (1 TO 2)
An analysis of the student's professional preparation for teaching, identifying areas in which students need to bolster weaknesses and augment strengths and arranging for more preparation in these areas.
Prerequisite: one term of student teaching.
A total of 2 credits may be earned.

EDFO - EDUC: FOUNDATIONS
EDFO 420 - Social, Historical, and Philosophical Foundations of Education (3)
Advanced examination of education and the teaching profession, including a focus on becoming a professional educator. Special focus on the historical, philosophical, and sociological aspects of education. Leads students through a reflective critique of our education system and the society of which it is an essential part. Consists of discussions regarding teacher organizations, teaching skills (or pedagogy) and curriculum from an ethical human rights framework in order to reflect upon why an individual may be committed to teaching as a profession.
Students must be junior standing.
EDGE - EDUCATION: GENERAL
EDGE 390 - Honors Colloquium in Education (2)
The critical analysis and evaluation of selected controversial issues in American education.
Restricted to honors students.

EDHI - EDUCATION: HIGHER
EDHI 102 - Introduction to Students as Leaders (1)
Emerging leadership styles. Theoretical and experiential bases for developing leadership skills and ethics through seminars and mentoring. Attention given to defining individual leadership styles and setting developmental goals.
A total of 2 credits may be earned, but no more than 1 in any one semester or term.
Open only to "Excellence in Leadership" phase one program participants.

EDHI 200 - Introduction to Personnel Services in Residence Halls (1 TO 3)
Principles involved in self-awareness, developing interpersonal and intrapersonal skills, and examining the development of community within the residence hall.
Prerequisite: sophomore standing, permission of the department chairperson.
A total of 3 credits may be earned.

EDHI 201 - Advanced Personnel Services in Residence Halls (2)
Current issues in student personnel are investigated as they relate to the operation of university residence halls. In the context of student development, challenges presented by the communities formed within residence halls are researched, studied, and discussed.
Prerequisite: EDHI 200; permission of a housing and residence life staff member.

EDHI 202 - Students as Group Leaders (1)
Examines the dynamics of group leadership. Focuses on the theoretical and experiential bases for developing group leadership skills and ethics. Attention is given to involvement in student organizations through workshops and faculty mentoring.
A total of 2 credits may be earned, but no more than 1 in any one semester or term.
Open only to "Excellence in Leadership" phase two program participants.

EDHI 302 - Student Leaders in Community Service (1 TO 3)
Introduction to and analysis of historical and current theories of leadership; examination of critical thinking, ethics, and methods of inquiry as they pertain to the process and study of leadership; analysis of leadership competencies, such as communication, problem solving, and being an agent of change will also be explored.
Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.
Open only to "Excellence in Leadership" phase three participants and leadership studies minors.

EDHI 401 - Special Topics in Leadership (1 TO 3)
Critical examination of selected leadership topics and issues in leadership. Designed to help students become familiar with current trends and issues associated with leadership, as well as practical application.
May be repeated once by permission of the instructor.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

EDHI 402 - Global Leadership: Senior Capstone Experience (1 TO 3)
Applied experience in the field of leadership studies and accompanying seminar. Students will complete 60 hours of field experience, practice reflective journaling, and reach individual conclusions about leadership issues from a global perspective using, as a basis for judgment, prior academic work as well as practical experience.
Prerequisite: EDHI 302; permission of the department chairperson.
A total of 3 credits may be earned.
Open only to "Excellence in Leadership" participants and leadership studies minors.

EDJH - ED: JR HI MID SCHL
EDJH 299 - Independent Study in Junior High/Middle School Education (1 TO 3)
Independent study and research in junior high/middle school topics and activities to be chosen in consultation with an instructor with competence in the area involved.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

EDJH 385 - Principles of Teaching in the Middle School (3)
Combines the theory and practice of teaching at the middle school level. Includes the study of interdisciplinary planning and instructional strategies, cooperative learning, technology, classroom management, and current curricular
issues. Intensive in-school assignments, observations, participation, and direct contact with adolescents required. Prerequisite: permission of the department chairperson. Parallel: EDSE 380.

EDJH 412 - Instructional Strategies and Approaches in Junior High/Middle School (3)
Conditions affecting the total instructional responsibilities of junior high/middle schools are studied. Students are required to develop skills in individualizing instruction to serve the full range of students, working cooperatively with other professional personnel, and instructional techniques and evaluation procedures especially appropriate for junior high/middle school teaching. Prerequisite: EDMU 205; EDPS 250 or EDPS 251 or EDPS 351.

EDJH 434 - Classroom Management: Improving Student Behavior in Junior High/Middle School (3)
Designed to prepare prospective junior high/middle school educators to cope with discipline problems in all junior high/middle school settings. Emphasizes skills and procedures in preventing or remedying disruptive behavior by junior high/middle school students and ways to create positive environments for learning.

EDJH 460 - Student Teaching in the Junior High/Middle School (6 TO 7)
Required for the standard license in secondary education. Involves a full-day assignment of 10 weeks in an approved junior high/middle school. Prerequisite: admission to student teaching. A total of 7 credits may be earned.

EDJH 465 - Elective Student Teaching: Junior High/Middle School (3 OR 5)
Elective student-teaching experience enables a full semester in a full-day student teaching assignment in an approved junior high/middle school setting. Offered credit/no credit only. Prerequisite: admission to student teaching. Parallel: EDJH 460. A total of 5 credits may be earned.

EDPS - EDUC: PSYCHOLOGY
EDPS 250 - Human Growth and Development (3)
Introduction to human development from birth through adolescence. Covers biological, cognitive, social, and emotional development as they relate to family, school, community, and broader social contexts. Not open to students who have credit in EDPS 260.
Open only to students in all-grade education programs.

EDPS 251 - Human Growth and Development for Secondary Education (3)
Introduction to human development emphasizing the preadolescent and adolescent periods. Covers biological, cognitive, social, and emotional development as they relate to educational practice in middle school and high school settings. Not open to students who have credit in EDPS 250. Open only to students in secondary education programs.

EDPS 254 - Psychology of Early Childhood (3)
Study of the development of young children from birth to age eight. Emphasizes physical, cognitive, social, and emotional development, particularly as it relates to child care and early childhood education settings.

EDPS 260 - Human Growth and Development for Elementary Education (3)
Introduction to human development emphasizing the preschool and middle childhood periods. Covers biological, cognitive, social, and emotional development as they relate to educational practice in the preschool and elementary school settings. Not open to students who have credit in EDPS 250. Open only to elementary and early childhood education majors.

EDPS 270 - Human Development Across the Lifespan (3)
Introduction to human development from conception to death. Covers biological, cognitive, social, and emotional development as they apply to family, school, community, and broader social contexts.

EDPS 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Topic titles will be announced before each semester. A total of 6 credits may be earned.

EDPS 306 - Behavior Analysis in Education (3)
Helps students to translate learning principles into teaching practices; to design and implement behavior analysis procedures that enhance motivation and learning in educational settings and decrease behavior problems; and to assess the effects of such instructional techniques.

EDPS 345 - Educational Tests and Measurement (3)
Teacher constructed tests, standardized educational tests, and performance assessments, along with the use of such
tests as instruments for the evaluation of learning.
Techniques of test construction.

**EDPS 350 - Child Psychology (3)**
An upper-level study of child development. Covers the biological, cognitive, and social developmental processes from conception to the transition into early adolescence, emphasizing current research in child development.

**EDPS 351 - Adolescent Psychology (3)**
An upper-level study of adolescent development. Covers the biological, cognitive, and social developmental processes from the beginning of puberty through the transition into early adulthood, emphasizing current research in adolescent development.

**EDPS 355 - Adult Psychology (3)**
An upper-level course in adult development. Covers the biological, cognitive, and social developmental processes from early adulthood through late adulthood, including death and dying. Content is based on current theories and research.

**EDPS 360 - Service Learning with Children, Families, and Adults (3)**
Students will be placed with local agencies and work directly with children, adults, families, and/or older adults. Instruction and reflection will focus on developmental psychology.
Prerequisite: EDPS 350 or EDPS 351 or EDPS 355 or permission of the instructor.

**EDPS 370 - Immersive Learning with Children, Families, and Adults (3)**
This immersive course will focus on students working with children, youth, and families and/or developing programs, materials, or services to promote healthy development.
Prerequisite: EDPS 350 or EDPS 351 or EDPS 355 or permission of the instructor.

**EDPS 390 - Educational Psychology (3)**
Study of the psychological principles underlying the processes of teaching and learning. Primary focus is provided on the domains of research-based pedagogical strategies, best practices in assessment, and identifying influences on student learning, behavior, and motivation. Content will cover the theoretical bases of these concepts as well as promoting the applied implementation of best practices in educational settings.
Prerequisite: EDPS 250 or EDPS 251, or permission of the chairperson.
Not open to students who have credit in EDPS 393.

**EDPS 391 - Learning and Assessment in Early Childhood (3)**
An overview of the implementation and interpretation of assessments of learning and development in early childhood. Includes application of assessment results to plan early childhood curriculum that is responsive to and supportive of children’s development.
Prerequisite: EDPS 254 or EDPS 260 or permission of the instructor.

**EDPS 393 - Educational Psychology for Elementary Education (3)**
Study of the psychological principles underlying the processes of teaching and learning. Primary focus is provided on the domains of research-based pedagogical strategies, best practices in assessment, and identifying influences on student learning, behavior, and motivation. Content will cover the theoretical bases of these concepts as well as promoting the applied implementation of best practices in early childhood and elementary school settings.
Prerequisite: EDPS 260.
Not open to students who have credit in EDPS 390.

**EDPS 411 - Development of Creative Thinking (3)**
Examines theories and strategies for developing creative thinking among self and others. Analyses factors that facilitate creativity, such as personality characteristics, process strategies, and environmental conditions.

**EDPS 420 - Introduction to the Gifted and Talented Student (3)**
Examines psychological characteristics and educational needs of gifted and talented children. Topics include definitions, identification options, and programming components. Provides an overview of current and past practices in the field.

**EDPS 421 - Identification and Evaluation of Gifted and Talented Students (3)**
Explores past and current practices for identification of gifted students. Examines the measurement and assessment issues inherent in recognizing and facilitating growth among gifted students. Illuminates best practices to evaluate the efficacy of gifted programs.
Prerequisite: EDPS 420.

**EDPS 423 - Investigating the Social and Emotional Needs of Gifted Students (3)**
Examination of the research related to gifted students and the social and emotional dimensions that are unique to this
population. Emphasis is placed on understanding the lived experiences of gifted children as well as social interventions and curricular strategies that can be employed within various educational environments.

**EDPS 425 - Models and Strategies for Gifted Learners (3)**
Examines theoretical models and strategies that serve as a foundation for curriculum and pedagogy for gifted students. Topics include facilitating creative and critical thinking, developing differentiated learning experiences, and designing defensible assessments.
Prerequisite: EDPS 420.

**EDPS 430 - Mental Health (3)**
Prerequisite: 6 credits of psychology.

**EDPS 496 - Practicum in Gifted Education (3)**
Application of knowledge of high ability education in practical settings, including but not limited to: supervised teaching experiences with high ability students, research projects examining high ability education, or gifted program evaluations.
Prerequisite: EDPS 420.
Open only to students in a gifted and talented program or with permission of the instructor.

**EDPS 498 - Seminar in Educational Psychology (3 TO 6)**
Group or individual investigation and study of current issues, problems, and developments in human development, classroom learning, and evaluation.
Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned, but no more than 6 in any one semester or term.

**EDPS 499 - Independent Study: Educational Psychology (1 TO 12)**
Individually planned experiences, extensive independent research in educational psychology.
Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned.

**EDRD - EDUCATION: READING**

**EDRD 204 - Literature for Children (3)**
An overview of children's literature and an intensive study of the various genres for grades K to 6. Core Transfer Library: English/Literature (IEL 1220)
Prerequisite: completion of decision point 1; C or better grade in EDEL 100 or EDSE 150 or ENG 150 or FCED 150 or SPCE 201 or PEP 161 or TEDU 195 or SCI 150 or MATH 150 or MUSE 100 or FL 150 or SS 150.
May be repeated only once.

**EDRD 300 - Reading and Language Instruction in the Elementary Classroom (3)**
Designed to introduce an understanding of reading and language arts instruction in elementary classrooms. Develops practices that support students' literacy learning and in planning and implementing a meaningful literacy program in elementary classrooms. Offers an experience-based exploration of literacy education practices.
Prerequisite: C or better in EDRD 204 and EDEL 200.
Parallel: EDEL 300.
May be repeated only once.

**EDRD 318 - Literature for Young Children (3)**
An introduction to literature for young children from pre-K to third grade.
May be repeated only once.

**EDRD 320 - Disciplinary Literacy in the Elementary Schools (3)**
Practical procedures for developing effective reading skills in elementary classrooms. Focuses on relationships between the process of reading and learning of content, planning for a range of student reading skills, and methods and materials.
Prerequisite: C or better in EDEL 100 or EDSE 150 or SPCE 201 or PEP 161 or TEDU 195 or SCI 150 or MATH 150 or MUSE 100 or FL 150 or SS 150 or ENG 150 or FCED 150.
May be repeated only once.

**EDRD 350 - Advanced Reading and Language Arts Instruction in the Elementary Classroom (3)**
Designed to expand an understanding of reading and language arts instruction in elementary classrooms. Develops practices that support students' literacy learning and in planning and implementing a meaningful literacy program in elementary classrooms. Continues an experience-based exploration of literacy education practices.
Prerequisite: C or better in EDEL 300 and EDRD 300.
Parallel: EDEL 350.
May be repeated only once.

**EDRD 390 - Early Emergent Literacy (3)**
Basic understanding of environments and planned activities that foster positive attitudes and interests related
to reading, procedures that stimulate early literacy development, and related practical experiences with young children.
Prerequisite: C or better in EDEL 100 or EDSE 150 or SPCE 201 or PEP 161 or TEDU 195 or SCI 150 or MATH 150 or MUSE 100 or FL 150 or SS 150 or ENG 150 or FCED 150.
May be repeated only once.

EDRD 400 - Teaching of Reading in Today's Schools (3)
Designed to review the current thinking, approaches, and methodology of teaching reading in today's schools. Attention is directed to theories of reading, emergent literacy, comprehension, vocabulary, and work analysis strategies as well as the planning of the total developmental reading program, with emphasis on reading at the elementary level.
Prerequisite: completion of decision point 2: admission to the teacher education program.
May be repeated only once.

EDRD 427 - Teaching Reading to Diverse Learners (3)
Addresses issues of reading instruction for children with diverse backgrounds, including language, race, class, gender, ethnicity, and exceptionality.
Must earn a grade of C or better to pass the course.
Prerequisite: C or better in EDRD 430; completion of decision point 2: admission to the teacher education program.
Parallel: EDRD 450.
May be repeated only once.

EDRD 430 - Assessment and Intervention in Elementary Schools (3)
Provides prospective teachers with the understanding of difficulties in reading and practical experiences in assessing reading difficulties and in study of corrective treatments. Includes guided laboratory experience.
Must earn a grade of C or better to pass the course.
Prerequisite: EDRD 350 or EDRD 400 with a grade of C or better; completion of decision point 2; admission to the teacher education program.

EDRD 445 - Using Computers in Reading Instruction (3)
Prepares prospective elementary school teachers to use the computer appropriately and effectively in a classroom reading program. Includes attention to commercially prepared courseware and teacher-developed applications.
Prerequisite: EDTE 120 or EDTE 350 for computer license add-on students; EDRD 400 or its equivalent for others; admission to the teacher education program.

EDRD 450 - Reading Strategies and Practicum (6)
Provides prospective classroom teachers (K-12) with opportunities to study and try various approaches and strategies in teaching reading. Offers experience in grouping students of varying reading abilities and in planning and implementing a classroom reading program appropriate for these students.
Must earn a grade of C or better to pass the course.
Prerequisite: C or better in EDRD 430; completion of decision point 2: admission to the teacher education program.
Parallel: EDRD 427.
May be repeated only once.

EDRD 490 - Strategies in the Teaching of Reading (3)
Provides pre-service teachers with the opportunity to fully explore the principles and practices underlying a balanced reading program while in a student teaching experience. Includes theory refinement, application experiences, and reflection activities.
Prerequisite: EDRD 430; successful completion of decision point 3; permission of the department chairperson.
Parallel: student teaching.

EDRD 498 - Seminar in the Teaching of Literacy (3)
Designed to provide students an opportunity to discuss, reflect on, and consider the teaching of reading and writing as well as to explore other areas of interest. Also focuses on discussion of the whole school reading and writing program and implications of policy on school practice.
Prerequisite: EDEL 463, EDEL 464, EDEL 465; EDRD 490; permission of the department chairperson.
May be repeated only once.

EDTE - EDUCATION: TECHNOLOGY
EDTE 120 - Introduction to Computing and Digital Media for Teachers (1)
Provides students with an overview of basic concepts and various applications frequently used by students in the BSU Teacher Education Program. Emphasizes skill development and familiarity with operating systems, file and folder structures, electronic portfolio development and management, and technology standards.
EDTE 204 - Selection and Management of Technology Resources (3)
Introductory study of principles and recommended practices for selection, acquisition, maintenance, and utilization of educational media, equipment, and communication technologies. Emphasis on curriculum use of technologies.

EDTE 350 - Curricular Integration of Technology (3)
Effective technology integration into teachers' instructional practice is the focus of this course. Emphasis is placed on teachers' conceptual development toward instruction and how technology can support student learning and instructional objectives. Pre-service teachers develop standards-based lessons where various technologies support critical thinking and learning of their students.

EDTE 352 - Multimedia Web Design and Development for Education (3)
Emphasizes design and development of Web-based multimedia modules into K-12 curricula. Interactive Web sites are developed.

EDTE 355 - Learning and Teaching with Emerging Technologies (3)
Content examines the affordances and constraints to learning the teaching that emerge with new technologies. Critical examination of emerging technologies helps students to recognize and evaluate how technology may affect the learning and teaching process.

EDTE 360 - Studies in Educational Technology (3)
Students conduct in-depth studies of emerging issues in educational technology. May evaluate and/or develop innovative applications of computing, information technology, or digital media to K-12 and other learning contexts.

EDTE 365 - Visual and Digital Literacies (3)
Examines theories of visual and digital literacy in relation to teaching and learning in formal and informal contexts. Provides development opportunities for visually-oriented technologies including concept mapping, digital video, podcasting, and simulations. Explores alternative literacies and problems of access, interpretation, and representation of knowledge and identity in digital forms.

EDTE 470 - Technology Policy and Ethics (3)
Examines the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and the policies that affect how technology is realized in schools and their surrounding communities. Addresses the leadership roles necessary for developing enabling conditions for technology integration. Prerequisite: EDTE 350.

EDTE 480 - Internship in Educational Technology (2 TO 4)
Application of educational technology in classroom or schools under supervision by professors, classroom teachers, and administrators. Topics to be chosen in agreement with professor and field contact. Prerequisite: EDTE 470.
A total of 4 credits may be earned.

EDTE 485 - School Information Infrastructures and Technology Leadership (3)
Explores emergent models and information systems for online learning, assessment, learning management, and content management in K-12 contexts. Examines network solutions for school libraries, labs, and classrooms including 1:1 computing models. Defines leadership responsibilities and provide immersive experiences for planning, deployment, and integration of sustainable solutions in schools. Prerequisite: EDTE 470 or permission of the department chairperson.

EMDD - EMERGING MEDIA DES DEV
EMDD 101 - The Digital World (3)
Introduction to types of human interaction made possible by digital media. Exploration of individualization, innovation, imagination, interactivity, minimization, and internationalization of digital communication. Positive and negative impacts and ramifications of a digital world.

EMDD 201 - Web Design and Usability (3)
Conceptual introduction to design and critique of digital messages in terms of source objectives, audiences, and society effects. Specific emphasis on theories and evaluations of usability testing of Web site. Prerequisite or parallel: EMDD 101.

EMDD 210 - Introduction to Social Media (3)
An examination of social media technologies and applications of emerging technologies on various careers aimed at students of all skill levels. Students will build their own Web sites using existing tools, engage in social and mobile networks, and deploy a variety of social media applications using pre-existing software tools. Prerequisite or parallel: EMDD 101.
EMDD 211 - Interactivity Design (3)
Digital media design as the design of artifacts to support interactive experience. Explores relationships among interactivity, interface design, and communication. Individual and collaborative projects geared to heighten understanding of designing for interactivity.
Prerequisite or parallel: EMDD 101.

EMDD 212 - Digital Image Design (3)
Emphasizes aesthetic understanding and practical facility with digital content as effective visual communication. Emphasis on development of digital competencies, techniques, and aesthetics.
Prerequisite or parallel: EMDD 101.

EMDD 213 - Digital Video Design (3)
Basic knowledge and laboratory work in development of digital video and audio. Introduction to creating digital video productions with digital cameras and computer hardware and software. Aesthetics and techniques of digital video and audio recording and non-linear editing.
Prerequisite or parallel: EMDD 101.

EMDD 214 - Digital Sound Design (3)
Explores creative use and manipulation of digital audio to produce compositions and sound designs suitable for different types of digital media projects. Focuses on technical skills, creativity, and an understanding of digital audio in context.
Prerequisite or parallel: EMDD 101.

EMDD 215 - Usability (3)
Covers range of usability and user experience concepts and focuses on usability testing of interactive apps and web pages. Explores relationships between interface, information, and user experience by way of testing navigability, architectures of interaction, and user-centered design. Focus is placed on the attitudes and behaviors of users.
Prerequisite or parallel: EMDD 101 or JOUR 206.

EMDD 216 - Design Thinking (3)
Emphasizes the wisdom of crowds while proposing and solving real-world problems with applied design thinking techniques. Explores design by seeking stakeholders for insight and feedback regarding the approach to a particular design problem before presenting solutions.
Prerequisite or parallel: EMDD 101 or JOUR 206.

EMDD 299X - Experimental/Development Topics (3)
Topics relevant to the discipline. Course titles to be announced before each semester.

EMDD 375 - Digital Storytelling (3)
Covers fundamental of writing, formatting, digitizing, adapting, repurposing, and distributing digital media stories for application in information, communication, and entertainment industries.
Prerequisite: EMDD 101.

EMDD 390 - Independent Studies in Digital Media (3)
Academic or creative digital media project directed by a Ball State faculty member. Project may be performed in conjunction with graduate EMDD project design teams. Written proposal must be approved by the digital media minor program director prior to term of study.

EMDD 495 - Senior Capstone (3)
Synthesis and culmination of undergraduate digital media design and production experiences in conjunction with graduate EMDD project design teams.
Prerequisite: EMDD 101.

EMDD 499 - Colloquium (1 OR 2)
Attendance at colloquia, workshops, and Center for Media Design events as specified in the digital media student handbook is the basis for earning colloquium credit. Offered credit/no credit only. A total of 2 credits may be earned. Open only to digital media minor students.

EMHS - EMER MGT HMLND SEC
EMHS 299X - Experimental/Developmental Topics (1 TO 3)
Topics relevant to emergency management and homeland security. Course titles will be announced before each semester. A total of 3 credits may be earned.

EMHS 350 - Hazardous Materials Health and Safety (3)
Worker health and safety principles and practices in: handling hazardous materials, waste remediation, and emergency responses to accidental chemical releases and terrorist episodes.

EMHS 351 - Introduction to Emergency Management and Homeland Security (3)
Introduction to principles of emergency management and homeland security such as preparedness, response, recovery, and mitigation. Other concepts include hazards, communications, management, health issues, and tools
utilized in emergency management. Discussion of relevant issues from a multi-disciplinary approach.

**EMHS 352 - Science of WMDs and Technological Hazards (3)**
Application of scientific principles to technological hazards including biological, chemical, radiological, nuclear and explosive weapons (WMDs). Discussion of relevant principles in biology, chemistry, physics, and other sciences. Effects of hazards on air, water, food supplies, and human health.

**EMHS 353 - Arson Investigation (3)**
Examination of the principles and practices involved in arson investigation. Extensive discussion of fire science, fire dynamics, fire analysis, properties of explosives and their reactions, scientific methodology, hazardous materials, building construction, human behavior, and analytical tools in the arson investigation.

**EMHS 355 - International Domestic Terrorism (3)**
Examination of international and domestic terrorist organizations, including ideologies, tactics, training, and sources of funding. Students will gain a solid understanding of key concepts of doctrine, leaders, goals, history, ideology, and definitions of terms.

**EMHS 389 - WMD Awareness and Response (3)**
Open only to juniors and seniors.

**EMHS 469 - Professional Practice (1 TO 6)**
Supervised experience in emergency planning and management, science of hazards, and/or cyber security. Connects academic with professional experiences.
Prerequisite: EMHS 351, EMHS 352; permission of the department chairperson.
A total of 6 credits may be earned.
Open only to juniors and seniors.

**EMHS 493 - Special Topics (1 TO 6)**
Provides an opportunity to conduct independent study of emergency management and homeland security topics of special interest to students.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

**ENEF - ENGLISH-FORGN LANG**

**ENEF 101 - Writing Fundamentals (1.5 TO 3)**
Focuses on the development of basic writing skills. Students will identify parts of the sentence, apply basic rules for writing, write sentences in different tenses, and practice the writing process, especially proofreading. Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 102 - Grammar Fundamentals (1.5 TO 3)**
Provides the foundations of language structure for the students. Key concepts that need to be communicated are parts of speech and basic word order. Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 103 - Reading Fundamentals (1.5 TO 3)**
Assists students in gaining and practicing recognition skills such as skimming and scanning for pre-level one reading development. Gives opportunities for developing reading comprehension and also provides the students with practice in the skills of responding appropriately to demonstrate comprehension of reading material. Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 104 - Oral Communication Fundamentals (1.5 TO 3)**
Students will learn how to respond appropriately to basic verbal classroom directions, make polite requests to an instructor, request information from others, introduce themselves and others verbally, and retell information from verbal introductions of others. They will also gain practice in reporting on important and frequently-discussed topics. Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 105 - Extensive Reading and Keyboarding 1 Fundamentals (1.5 TO 3)**
Focuses on increasing reading fluency and students' typing speed. Depending on the abilities of the students, the course can work on reading for enjoyment as well as comprehension and overall understanding, with the aid of an abridged reader. Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 106 - Vocabulary and Literacy Fundamentals (1.5 TO 3)**
Focuses on vocabulary acquisition, including the pronunciation and spelling of the words. Students are also
introduced to the vowel sounds of English, and must learn to recognize them orally and in writing.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 111 - Writing Level 1 (1.5 TO 3)**
Focuses on advancing students' ability to express their thoughts and inquiries in written form by using an added tense and learning about sentence variety. Students will also develop the ability to appropriately use basic electronic written communication in the target language. Finally, students will begin pre-development of research skills by being encouraged through writing exercises to ask questions of interest and to label sources of information.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 112 - Grammar Level 1 (1.5 TO 3)**
Students continue to master simple verb tenses, basic parts of speech, and simple sentences. They are introduced to compound and complex sentences. Students also continue to learn how to ask and respond to questions appropriately. In addition, students are introduced to the different meanings of phrasal verbs, definite and indefinite nouns as well as adjective forms.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 113 - Reading Level 1 (1.5 TO 3)**
Designed to help students develop reading and vocabulary skills. The topics in this course are real-world topics related to culture, science, social studies, and so forth. Students will improve their reading comprehension, acquire dictionary skills to build vocabulary, and develop visual literacy.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 114 - Oral Communication Level 1 (1.5 TO 3)**
Designed to enhance students' speaking skills along with the other language skills. Among other things, students will be able to introduce themselves and others, respond appropriately to common classroom directives, and report (orally or in writing) events using more than 10 sentences.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 115 - Extensive Reading and Keyboarding 2 Level 1 (1.5 TO 3)**
Designed to enhance students' reading fluency and typing speed. Two readers will introduce students to cultural concepts.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 116 - Vocabulary and Literacy Level 1 (1.5 TO 99)**
The focus is on vocabulary acquisition, including the pronunciation and spelling of the words on the Level 1 word list. Students continue to learn the IPA, increasing their knowledge of simple vowels and adding diphthongs and consonants.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENEF 121 - Writing Level 2 (1.5 TO 3)**
Teaches students to identify and write the following types of paragraphs: definition, description, process-analysis and opinion. Each of the writings should include all of the elements of a paragraph (i.e. topic sentence, supporting sentences and concluding sentence). They should also demonstrate correct spelling, accurate grammar, and a variety of sentence structures.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 122 - Grammar Level 2 (1.5 TO 3)**
Introduces more complex concepts of English grammar, such as modals. Students begin to analyze their grammar choices instead of simply applying the appropriate rule.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 123 - Reading Level 2 (1.5 TO 3)**
Focuses on increasing students' overall reading proficiency through reading practice of an authentic text. Students will also develop basic reading strategies such as using context and inflections in order to increase overall comprehension of a text and build on prior knowledge of a topic when reading.
Offered credit/no credit only.
A total of 3 credits may be earned.

**ENEF 124 - Oral Communication Level 2 (1.5 TO 3)**
Through open-ended, in-class group discussion and a variety of activities, students learn about general cultural behaviors, beliefs, and expectations in the U.S. The focus for this course is to guide students in becoming yet more familiar with and comfortable in a new culture and to aid them in becoming integral participants.
Offered credit/no credit only.
A total of 3 credits may be earned.
ENEF 125 - Extensive Listening 1 Level 2 (1.5 TO 3)
Students will improve both their discrete and global listening skills in this course. Students will watch American sitcoms and should understand the main idea/dilemma, produce a paragraph describing characters, and analyze politeness, formality, and gestures in the episodes.
Offered credit/no credit only.
A total of 3 credits may be earned.

ENEF 126 - Vocabulary and Literacy Level 2 (1.5 TO 99)
Using a graded reader, students will identify the main idea in a reading, use context to identify unknown vocabulary, and identify specific figures of speech, such as metaphors, similes, and personification. They should also be able to generate and answer questions about a text and summarize accurately.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 131 - Writing Level 3 (1.5 TO 3)
Level 3 Writing is the introduction to the academic essay. Students learn the basic features of an essay and write two essay types: compare/contrast and a summary/response essay. They also are introduced to topics such as incorporating citations, summarizing, and paraphrasing. Students are expected to acquire more than a basic understanding of intellectual property as they learn these skills.
Offered credit/no credit only.
A total of 3 credits may be earned.

ENEF 132 - Grammar Level 3 (1.5 TO 3)
Students develop mastery in the interpretation and production of the tense-aspect system of English, paying particular attention to present perfect, present perfect progressive, and past perfect.
Offered credit/no credit only.
A total of 3 credits may be earned.

ENEF 133 - Reading Level 3 (1.5 TO 3)
Students in Level 3 engage in reading an authentic academic text as they use prior knowledge and comprehension strategies to understand the meaning. They also develop research skills by locating materials through CardCat.
Offered credit/no credit only.
A total of 3 credits may be earned.

ENEF 134 - Oral Communication Level 3 (1.5 TO 3)
Communicative speaking/listening course that focuses on higher-level usage of conversational skills such as interviewing and formal group discussions. Pragmatic issues such as politeness, especially in agreement and disagreement, are key outcomes of the course. This course reinforces many skills including grammar, logical structures from writing, and vocabulary.
Offered credit/no credit only.
A total of 3 credits may be earned.

ENEF 135 - Extensive Listening 2 Level 3 (1.5 TO 3)
Students will improve both their discrete and global listening skills in this course. Thus, the approach should be two-pronged, using both the text Sound Advice (which is very much oriented towards distinguishing sound changes in spoken American English) and using authentic listening clips from news reports.
Offered credit/no credit only.
A total of 3 credits may be earned.

ENEF 136 - Vocabulary and Literacy Level 3 (1.5 TO 99)
The key goals of this course are to broaden and deepen learners’ working vocabulary (Level 3 word list) and develop reading fluency.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 141 - Writing Level 4 (1.5 TO 99)
Provides students with the strategies and skills needed to write and edit a two-page cause and effect essay and a three-page argumentative paper. Focusing on critical thinking as a foundation of the writing process, students will learn to accurately paraphrase, summarize, and synthesize peer-reviewed articles and cite sources using APA style.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 142 - Grammar Level 4 (1.5 TO 99)
Focuses on grammatical features including the perfect and perfect progressive aspects, passive voice, relative clauses, and degree complements. Students continue to build on previous knowledge from earlier levels and work toward a better understanding in order to use the previous grammar rules in a meaningful way.
Offered credit/no credit only.
A total of 99 credits may be earned.
ENEF 143 - Reading Level 4 (1.5 TO 99)
Focuses on guiding learners through the process of using authentic academic textbooks and databases. Students learn to locate argumentative texts for future research projects; acquire the skills to evaluate the objectivity, credibility, and appropriateness of texts and cited sources; and develop reading strategies for understanding the structure and content of argumentative texts.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 144 - Speaking Level 4 (1.5 TO 99)
Students continue to learn and master the skills of participating in and leading academic classroom discussions in a culturally, pragmatically appropriate way. This is the last course to explicitly focus on these skills, so students should be confident in their discussion skills before completion of the course.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 145 - Listening Level 4 (1.5 TO 99)
Introduces students to academic lectures and teaches them the skills they need to comprehend their content. Students learn to use their notes to successfully answer both detail-level and "big-picture" comprehension questions about a lecture. They also learn strategies, such as interpreting non-verbal cues, which can aid in comprehension of a lecture.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 146 - Vocabulary and Literacy Level 4 (1.5 TO 99)
Focuses on improving reading fluency through reading a high-level abridged novel and mastering the Level 4 word list (part of the AWL). Students are expected to apply critical thinking skills to the texts.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 151 - Writing Level 5 (1.5 TO 99)
The primary goal is to teach students how to write a six-page argumentative research paper using a process approach that involves brainstorming, prewriting, database research, drafting, revising, and publication. Students also complete an annotated bibliography.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 152 - Grammar Level 5 (1.5 TO 99)
Students will build on their knowledge of previously learned structures and add more complex grammatical features such as sensory and causative verbs, modals of prediction and inference, and conditionals.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 153 - Reading Level 5 (1.5 TO 99)
Offers a rigorous continuation of Level 4 academic reading, emphasizing critical reflection. Students will guess the meaning of words in context, identify main ideas, and trace arguments. Students will also paraphrase, summarize, and interpret graphs/tables/charts to demonstrate comprehension.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 154 - Speaking Level 5 (1.5 TO 99)
Students learn about delivery and presentation skills as well as focus on creating strong content. In addition to the presentation focus, there is a pronunciation goal of improving intonation.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 155 - Listening Level 5 (1.5 TO 99)
The purpose of this course is to continue preparing students to comprehend academic lectures. While the course reinforces overall listening skills developed in Level 4, it introduces students to the abstract thinking skills that they need to assess and support arguments presented in academic lectures. They will also be expected to understand a lecture after hearing it once.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 161 - Writing Level 6 (1.5 TO 99)
Students continue to learn and practice the various steps necessary to do effective research. The focus of this course is to write a well-supported and well-organized argumentative research paper of approximately 8-10 pages in length. Students will use library databases to search for sources, identify a research topic of their own, create an annotated bibliography, and write a literature review.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 162 - Grammar Level 6 (1.5 TO 99)
Focuses on more advanced grammar features including various finite and non-finite clauses; complex sentences;
the verb system—tense, aspect, and voice; and determiners. Students will work on meaning and production while continuing to build on previous knowledge from past grammar courses. Students should also focus on self-correction and using the grammar learned in this course in authentic and meaningful ways.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 163 - Reading Level 6 (1.5 TO 99)
Students practice critical reading with longer academic texts and apply reading strategies acquired in previous levels. They practice and develop advanced college reading skills (vocab in context, main ideas, inference, argument, etc.) and analyze texts to trace different types of arguments.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 164 - Speaking Level 6 (1.5 TO 99)
Focuses on both debate and pronunciation. The purpose of debate in this course is to help students develop critical argumentative and thinking skills. In addition to debate, students are encouraged to become aware of their own pronunciation difficulties and set their own goals for pronunciation improvement.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 165 - Listening Level 6 (1.5 TO 99)
The purpose of this course is to provide instruction in advanced listening comprehension. The ability to take efficient and accurate notes of an academic lecture and use those notes to answer comprehension questions is a fundamental course outcome.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 166 - Vocabulary and Literacy Level 6 (1.5 TO 99)
Focuses on improving reading fluency and comprehension through reading a BSU-selected freshman reader and mastering the Level 6 word list (part of the AWL).
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 171 - Repeating Writing (1.5 TO 99)
Designated as a writing course for part-time IEI students repeating a class in the same semester.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 172 - Repeating Grammar (1.5 TO 99)
Designated as a grammar course for part-time IEI students repeating a class in the same semester.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 173 - Repeating Reading (1.5 TO 99)
Designated as a reading course for part-time IEI students repeating a class in the same semester.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 174 - Repeating Speaking (1.5 TO 99)
Designated as a speaking course for part-time IEI students repeating a class in the same semester.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 175 - Repeating Listening (1.5 TO 99)
Designated as a listening course for part-time IEI students repeating a class in the same semester.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENEF 176 - Repeating Vocabulary and Literacy (1.5 TO 99)
Designated as a vocabulary and literacy course for part-time IEI students repeating a class in the same semester.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENG - ENGLISH
The content of all English department courses will reflect appropriate attention to matters of race, ethnicity, gender, and class, as well as to views and works of members of nondominant social groups.

ENG 101 - Foundations of Rhetoric and Writing 1 (2)
The first of two consecutive semesters of a portfolio-based writing course. Introduces principles of rhetoric; basic research methods; elements, strategies, and conventions of persuasion used in constructing written and multi-modal texts.
Prerequisite: appropriate placement.

ENG 102 - Foundations of Rhetoric and Writing 2 (2)
The second of two consecutive semesters of a portfolio-based writing course. Develops understanding of principles of rhetoric; basic research methods; elements, strategies,
and conventions of persuasion used in constructing written
and multi-modal texts.
Prerequisite: appropriate placement.

ENG 103 - Rhetoric and Writing (3)
Introduces and develops understanding of principles of
rhetoric; basic research methods; elements, strategies, and
conventions of persuasion used in constructing written and
multi-modal texts. Core Transfer Library:
English/Literature (IEL 1240)
Prerequisite: appropriate placement.
Not open to students who have credit in ENG 101 or ENG
102.

ENG 104 - Composing Research (3)
Applies the fundamentals of rhetoric to the research
process: methods of research; the rhetorical nature of
research; elements, strategies, and conventions common to
research writing, including multi-modal presentations of
new knowledge. Core Transfer Library: English/Literature
(IEL 1241)
Prerequisite: ENG 101 and ENG 102; or ENG 103; or
appropriate placement.

ENG 114 - Composing Research (Honors College) (3)
Applies fundamentals of rhetoric to the research process:
methods of research; the rhetorical nature of research;
I elements, strategies, and conventions of research writing,
including multimodal presentations of new knowledge.
Major research project; some literary analysis.
Prerequisite: ENG 101, ENG 102; or ENG 103; or
appropriate placement.
Not open to students who have credit in ENG 104.
Open only to Honors College students.

ENG 150 - Introduction to Teaching English Language
Arts in Secondary Schools (3)
An introduction to the process of becoming an English
Language Arts teacher in secondary schools. Through
coursework and targeted clinical experiences, teacher
candidates will begin to form their professional identities
as future educators, develop a beginning knowledge base
for teaching, and engage with the integration of technology
throughout the learning process. They will also observe,
develop, and demonstrate initial core teaching practices.

ENG 205 - World Literature (3)
The study of selected works of world literature other than
British and American literature. Core Transfer Library:
English/Literature (IEL 1251)
Prerequisite or parallel: ENG 206 or ENG 230, or
permission of the department chairperson.

Not open to honors students who have completed or will
complete HONRS 201, HONRS 202, or HONRS 203.

ENG 206 - Reading Literature (3)
An introduction to the nature and interpretation of literary
works and to reading and writing critically about literature.
Credit does not apply to English majors.

ENG 210 - Introduction to Rhetoric and Writing (3)
Introduction to the field of Rhetoric and Writing studies.
Readings and written work that emphasize the diversity
and scope of the field. Core Transfer Library:
English/Literature (IEL 1270)
Prerequisite: ENG 104 or ENG 114.

ENG 213 - Introduction to Digital Literacies (3)
Teaches ways of reading, analyzing, researching, and
composing in emerging media.
Prerequisite: ENG 104 or ENG 114.

ENG 214 - Introduction to Literature and Gender (3)
Study of gender and sexuality as represented and
constructed in works of literature. Texts may include
literary, critical, and theoretical writings and works in
other media. Course material and expectations are
appropriate for students who are not majors or minors in
English.
Credit does not apply to English majors.

ENG 215 - Introduction to African-American
Literature (3)
Introduction to the African-American literary tradition in
the United States. Course material and expectations are
appropriate for students who are not majors or minors in
English.
Credit does not apply to English majors.

ENG 216 - Introduction to American Ethnic Literature
(3)
Introduction to the literary, oral, cultural, and historical
traditions of one or more specific American ethnic groups.
Course material and expectations are appropriate for
students who are not majors or minors in English.
Credit does not apply to English majors.

ENG 217 - Introduction to Queer Literature and Queer
Theory (3)
Introduction to queer literature and queer readings of texts
as well as exploration and discussion of queer theory.
Course material and expectations are appropriate for
students who are not majors or minors in English.
Credit does not apply to English majors.

**ENG 220 - Language and Society (3)**
Addresses major social issues related to language use in the United States. Students learn through case studies and other projects to identify hidden assumptions, frame questions requiring research, and do the research necessary to make informed decisions about linguistic issues in our society.

**ENG 221 - Fundamentals of English Grammar and Usage (3)**
Basic English grammar and usage. Cannot be counted as part of major or minor programs in English.

**ENG 230 - Reading and Writing about Literature (3)**
Intensive study and practice of methods of inquiry, rhetorical and documentation conventions, and terminology associated with critical writing about literature. Develops skills for successful study, discussion, and writing about literature.
Prerequisite: ENG 104 or ENG 114.
Open only to English majors and minors except by permission of the department chairperson.

**ENG 231 - Professional Writing (3)**
Explores theory and practice in workplace, organizational, and professional writing situations. Familiarizes students with the genres and practices of professional writing in traditional and emerging contexts. Core Transfer Library: English/Literature (IEL 1242)
Prerequisite: ENG 104 or ENG 114.

**ENG 240 - American Literature 1: The Beginnings to 1860 (3)**
Survey of American literature from its beginning through the middle nineteenth century, including selections from a broad range of major and minority traditions. Core Transfer Library: English/Literature (IEL 1210)
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 250 - American Literature 2: 1860 to the Present (3)**
Survey of selected American writers and the various literary movements since 1860, including selections from a broad range of major and minority traditions. Core Transfer Library: English/Literature (IEL 1211)
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 260 - British Literature 1: The Beginnings to 1780 (3)**
British literature from about 450 to 1780, with attention to the social, historical, and philosophical backgrounds.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 280 - British Literature 2: 1780 to the Present (3)**
British literature from 1780 to the present, with attention to the historical, social, and philosophical background.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 285 - Introduction to Creative Writing (3)**
Introduction to the craft, terminology, and techniques of multiple genres, including fiction, poetry, and creative nonfiction. Core Transfer Library: English/Literature (IEL 1230)

**ENG 299X - Experimental/Developmental Topics (3 TO 6)**
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

**ENG 303 - History of Rhetoric (3)**
Beginning with ancient rhetoric and focusing on major historical periods, surveys the historical development of rhetoric, emphasizing the cultural context of ideas, and the construction of rhetorical "traditions."
Prerequisite: ENG 104 or ENG 114.

**ENG 306 - Creative Nonfiction Writing (3)**
Intensive study of creative nonfiction, with practice in writing and critique.
Prerequisite: ENG 285.

**ENG 307 - Fiction Writing (3)**
Intensive study of fiction, with practice in writing and critique.
Prerequisite: ENG 285.

**ENG 308 - Poetry Writing (3)**
Intensive study of poetry, with practice in writing and critique.
Prerequisite: ENG 285.

**ENG 310 - Screenwriting (3)**
Introduction to screenwriting for television, film, or new media, with practice in writing and critique.
Prerequisite: ENG 285.
ENG 320 - Introduction to Linguistic Science (3)
The basic concepts, scope, and methodology of the science of language in its descriptive and historical functions. Core Transfer Library: English/Literature (IEL 1260)

ENG 321 - English Linguistics (3)
Modern English grammar with special attention to phrase and sentence-level syntax.

ENG 322 - Language and Cross-Cultural Communication (3)
Considers sociolinguistic issues in cross-cultural communication in oral, written and digital communication. Special attention is paid to linguistic politeness, common pitfalls in the performance of speech acts such as agreeing, disagreeing, suggesting, complimenting, and conversational organization, turn-taking, and patterns of negotiation.
Prerequisite: ENG 220.

ENG 323 - Discourse Structure and Strategies (3)
Application of linguistic and rhetorical methodologies to examine the effects of language on listeners and readers. Relates morphological, syntactic, semantic, and discourse structures to intentions and effects. Requires practice of the structures studied.
Prerequisite: ENG 220.

ENG 328 - Language and Gender (3)
Offers a detailed examination of the relationship between language and gender. Students explore how individuals use linguistic resources to construct gender identities through analysis of language, including pronunciation, conversational norms, and narrative styles.

ENG 329 - Editing and Style (3)
Introduction to approaches to editing, style, and writing conventions; intensive practice in editing, collaborative writing, and critique appropriate for students in professional writing or other writing-intensive majors or careers.

ENG 332 - Linguistic Phonetics and Phonology (3)
Uses a linguistic approach to explore speech sounds as physical entities (phonetics) and as elements in language systems (phonology). Participants will learn the linguistic methods employed to describe, classify, and analyze speech (articulatory phonetics) and "see" speech to better understand its physical properties (acoustics). Participants will also learn to find and describe general speech sound patterns in natural languages and the systematic relationships between the actual sound produced and the abstract cognitive patterns.
Prerequisite: ENG 320 or ENG 334.

ENG 334 - English Linguistics for Educators (3)
An introduction for ESL teachers to fundamentals of linguistics, with special attention to the structure and use of English and how its features compare to those of other languages frequently spoken by ESL learners. This includes sound systems, vocabulary, grammar, differences between oral and written language use, and the intersection of language and culture.

ENG 335 - Writing and Reading Public Discourse (3)
Draws on different rhetorical perspectives to read, analyze, and produce public discourse in diverse media for a variety of audiences and purposes.
Prerequisite: ENG 104 or ENG 114.

ENG 345 - Early American Literature (3)
Examination of a range of authors, genres, movements, and/or ideas in early American literature.
Prerequisite: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 346 - Nineteenth-Century American Literature (3)
Examination of a range of authors, genres, movements, and/or ideas in nineteenth-century American literature.
Prerequisite: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 347 - Twentieth-Century American Literature (3)
Examination of a range of authors, genres, movements, and/or ideas in twentieth-century American literature.
Prerequisite: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 350 - Teaching Writing in Secondary Schools (3)
Concentrates on materials, methods, and resources used in teaching composition and the use of performance assessments in the English Language Arts classroom. Additional focus on technology and multimedia in practice, introduction to pedagogical practices and curriculum development.
Required of teaching majors; may not be applied toward other departmental programs.
Prerequisite: permission to enroll in 300-/400-level professional education courses.
Parallel: EDJH 385.
ENG 351 - Twenty-First-Century American Literature (3)
Examination of a range of authors, genres, movements, and/or ideas in twenty-first-century American literature.
Prerequisite: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 362 - Medieval British Literature (3)
Study of literary works and cultural elements of medieval Britain. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 363 - Renaissance and Seventeenth-Century British Literature (3)
Study of literary works and cultural elements of early-modern Britain. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 364 - Restoration and Eighteenth-Century British Literature (3)
Study of literary works and cultural elements of the late-eighteenth century. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 365 - Nineteenth-Century British Literature (3)
Study of literary works and cultural elements of the nineteenth century. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 366 - British Literature 1900-1945 (3)
Study of literary works and cultural elements of the modern period. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 367 - Contemporary British Literature (3)
Study of literary works and cultural elements of the period from 1945 to the present. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.
Prerequisite: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 369 - Professional Experience (1 TO 12)
Supervised work experience appropriate for English majors and minors, including writing and research. Assignments may be part-time or full-time, paid or unpaid, for one or more semesters in approved businesses or organizations.
Prerequisite: junior standing, permission of the internship coordinator or department chairperson.
A total of 12 credits may be earned, but only 3 may count as credit in an English major or minor.

ENG 388 - English Studies Abroad (3 TO 12)
English Studies at approved study-abroad sites. Credit applied to department requirements as approved by the department chairperson.
A total of 12 credits may be earned.

ENG 389 - Practicum in Peer Tutoring in Writing (3)
Theories and practice of teaching writing and multiliteracies in non-classroom settings. Includes classroom discussion of writing theories and writing center pedagogies and field experience in writing center or similar setting.

ENG 390 - Honors Colloquium in English (1 TO 4)
Exploration of selected issues in English with emphasis upon individualized study and reporting.
A total of 4 credits may be earned.
Open only to honors students.

ENG 395 - Teaching Literature and Language in Secondary Schools (3)
Concentrates on materials, methods, and resources used in teaching literature, visual representation, language, speaking, and listening in the English Language Arts classroom. Advanced study of pedagogical practices related to planning, curriculum, and professional development.
Required of teaching majors; may not be applied toward other departmental programs.
Prerequisite: ENG 350 or permission of the department chairperson.
Parallel: EDSE 380.

ENG 400 - Special Topics in English (3)
Special topics in one of the five subject areas of the department. Creative writing, English education, language and linguistics, literature, rhetoric and writing.
Prerequisite: permission of the department chairperson.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

**ENG 402 - Cultural Studies (3)**
Teaches advanced skills of close reading and contextual analysis of cultural texts (e.g. literature, film, television) and discourses (e.g. political, professional, journalistic).

**ENG 404 - Independent Study in English (1 TO 3)**
Designed for those who wish to conduct independent study and research in English.
Prerequisite: 24 credits in English at the 200 level or above at Ball State University and permission of the department chairperson.
A total of 3 credits may be earned.

**ENG 405 - Special Topics in Creative Writing (3)**
Variable topics course in creative writing.
Prerequisite: ENG 306 or ENG 307 or ENG 308.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 406 - Advanced Creative Nonfiction Writing (3)**
Advanced creative nonfiction writing, with study of contemporary writers and workshops of student work.
Prerequisite: ENG 306.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 407 - Advanced Fiction Writing (3)**
Advanced fiction writing, with study of contemporary writers and workshops of student work.
Prerequisite: ENG 307.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 408 - Advanced Poetry Writing (3)**
Advanced poetry writing, with study of contemporary writers and workshops of student work.
Prerequisite: ENG 308.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 409 - Creative Writing in the Community (3)**
Creative writing projects in the local community, including readings, performances, and workshops.
Prerequisite: ENG 306 or ENG 307 or ENG 308.

**ENG 410 - Advanced Screenwriting (3)**
Advanced screenwriting for television, film, or new media, with emphasis on developing scripts for production.
Prerequisite: ENG 310.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 412 - Reading in the Secondary English Classroom (3)**
An overview of the process of reading with practical suggestions for developing analytic skills for reading and interpreting written texts, including literary and popular materials used in the English classroom.
Prerequisite: ENG 150 or ENG 230.

**ENG 414 - Young Adult Literature (3)**
Recent literature suitable for students of varying abilities in junior high/middle and secondary schools. Emphasizes reading of selections with some attention given to methodology.
Prerequisite: ENG 206 or ENG 230 or permission of the department chairperson.

**ENG 421 - Studies in Literary History (3)**
Examination of the methods, definitions, and assumptions of literary histories. Texts may include literary, critical, theoretical, and pedagogical writings.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 422 - Studies: Authors (3)**
Focused study of literary works of one author or a small set of closely related authors, with attention to biographical, historical, political, and literary contexts.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 423 - Studies in Drama (3)**
Study of the drama of a specific time period and/or nation, and/or study of a specific issue or problem as represented in dramatic literature.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 424 - Genre Studies (3)**
An in-depth study of some aspect of genre theory and/or literature in a specified genre, focuses on a single genre or the comparison of various genres. May include genre theory as well as issues surrounding the composition or presentation particular to various genres.
ENG 425 - Film Studies (3)
An investigation of film as text within the field of English studies, focusing on the stylistic and narrative systems as well as the influence of economics, culture, audience, reception, history, theory, and process of artistic creation in cinema.

ENG 430 - Document Design and Visual Rhetoric (3)
Explores visual rhetoric, particularly focused on theories and best practices for the production of document designs. Familiarizes students with processes and techniques for producing and refining professional document designs.
Prerequisite: ENG 104 or ENG 114.

ENG 431 - Rhetoric, Writing, and Emerging Media (3)
Emphasizes and explores theories and practices of networked writing activity inherent in emerging media platforms and applications. This course has an applied focus, such that students will produce professional and public content for the Web, including a professional portfolio.
Prerequisite: ENG 213.

ENG 435 - Issues in Rhetoric and Writing (3)
A course in the rhetoric and writing major that focuses on an in-depth study of a single topic pertinent to composing verbal and visual texts.
Prerequisite: ENG 104 or ENG 114.

ENG 436 - Theory and Research in Teaching English to Speakers of Other Languages (3)
Psychological and linguistic bases of language learning and recent theories concerning the application of linguistic science to methodology and materials in second-language teaching.
Prerequisite: permission of the department chairperson.
Prerequisite or parallel: ENG 320 or ENG 334.

ENG 437 - Methods and Materials in Teaching English to Speakers of Other Languages (3)
Study and practice of a variety of methods in teaching English as a second or foreign language. Discussion of pedagogical issues in language teaching.
Prerequisite: permission of the department chairperson.
Prerequisite or parallel: ENG 320 or ENG 334.

ENG 437A - (3)
Study and practice of a variety of methods in teaching English as a second or foreign language. Discussion of pedagogical issues in language teaching.
Prerequisite: permission of the department chairperson.
Prerequisite or parallel: ENG 320 or ENG 334.

ENG 438 - TESOL Curriculum Development and Assessment (3)
Focuses on curriculum development and assessment and the use of materials to meet the specific needs of English language learners at various levels of proficiency.
Prerequisite: permission of the department chairperson.
Prerequisite or parallel: ENG 320 or ENG 334.

ENG 444 - Senior Seminar (3)
An investigation in some depth of a problem or question in English studies. Specific topics will vary by section and will be announced in advance by the instructor.
Prerequisite: senior standing or permission of the department chairperson.
Open only to senior English majors and English/language arts teaching majors.

ENG 457 - Practicum in Teaching English to Speakers of Other Languages (3)
Practical experience in observation, teaching, and analysis of teaching English as a second or foreign language.
Prerequisite: ENG 436, ENG 437.

ENG 457A - (3)
Practical experience in observation, teaching, and analysis of teaching English as a second or foreign language.
Prerequisite: ENG 436, ENG 437.

ENG 464 - Shakespeare (3)
An introductory study of representative plays (comedies, histories, tragedies) and some selections from the sonnets by Shakespeare.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

ENG 487 - Digital Literature Review: Immersive (3)
Immersive learning course in which students create the next issue of the Digital Literature Review, an undergraduate research journal in literature and cultural studies that covers a special topic each year. Students will work on individual research projects related to the special topic as well as work on teams to edit, design, and promote the Digital Literature Review and its accompanying blog.
Prerequisite: ENG 230 and permission of the instructor.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 489 - Practicum in Literary Editing and Publishing (3)**
History, philosophy, and practice of literary editing and publishing. Students will work on projects including the production and publication of a literary magazine.
Prerequisite: ENG 306 or ENG 307 or ENG 308 or ENG 310.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**ENG 490 - Literature and Gender (3)**
Study of gender and sexuality as understood, constructed, and contested in one or more cultural/historical settings. Texts may include literary, critical, and theoretical writings and works in other media.

**ENG 491 - Literature of African-American Traditions (3)**

**ENG 492 - Native American Literature (3)**
Study of materials from the oral and written literatures of Native Americans.

**ENG 493 - American Ethnic Literature (3)**
Study of the literary, oral, cultural, and historical traditions of a specific ethnic group and/or study of a range of responses by writers of color to a specific issue or theme.

**ENG 494 - Queer Literature/Queer Theory (3)**
Study of queer literature and queer readings of texts as well as exploration and discussion of prevalent queer theories.

**ENG 496 - Literary and Critical Theory (3)**
Study of major theoretical schools, concepts, and vocabularies pertinent to the study of literature in the 21st Century.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 497 - Studies: Literature in Translation (3)**
Study of works written in languages other than English. Texts may span a variety of genres, including poetry, fiction, non-fiction prose, and drama.
Prerequisite or parallel: ENG 206 or ENG 230, or permission of the department chairperson.

**ENG 498 - Studies in Global Literature (3)**
A study of major works from post-colonial countries and cultures, such as Nigeria, South Africa, India, and Jamaica, and the intellectual and literary movements associated with them. Students are also introduced to concepts associated with post-colonial literature and criticism such as colonialism, imperialism, anticolonialism and neocolonialism.

**ENIE - ENG:INTENSE.ENG.INST**

**ENIE 100 - IEI Level Fundamentals (9)**
A compilation of ENIE fundamentals level courses: ENIE 101 Writing, ENIE 102 Grammar, ENIE 103 Reading, ENIE 104 Speaking, ENIE 105 Listening, and ENIE 106 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

**ENIE 101 - Writing Fundamentals (1.5 TO 99)**
Focuses on the development of basic writing skills. Students will identify parts of the sentence, apply basic rules for writing, write sentences in different tenses, and practice the writing process, especially proofreading.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 102 - Grammar Fundamentals (1.5 TO 99)**
Provides the foundations of language structure for the students. Key concepts that need to be communicated are parts of speech and basic word order.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 103 - Reading Fundamentals (1.5 TO 99)**
Assists students in gaining and practicing recognition skills such as skimming and scanning for pre-level one reading development. It gives opportunities for developing reading comprehension and also provides the students with practice in the skills of responding appropriately to demonstrate comprehension of reading material.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 104 - Oral Communication Fundamentals (1.5 TO 99)**
Students will learn how to respond appropriately to basic verbal classroom directions, make polite requests to an instructor, request information from others, introduce themselves and others verbally, and retell information from
verbal introductions of others. They will also gain practice in reporting on important and frequently-discussed topics. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 105 - Extensive Reading and Keyboarding 1 Fundamentals (1.5 TO 99)**
Focuses on increasing reading fluency and students' typing speed. Depending on the abilities of the students, the course can work on reading for enjoyment as well as comprehension and overall understanding, with the aid of an abridged reader. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 106 - Vocabulary and Literacy Fundamentals (1.5 TO 99)**
Focuses on vocabulary acquisition, including the pronunciation and spelling of the words. Students are also introduced to the vowel sounds of English, and must learn to recognize them orally and in writing. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 110 - IEI Level 1 (9)**
A compilation of ENIE level 1 courses: ENIE 111 Writing, ENIE 112 Grammar, ENIE 113 Reading, ENIE 114 Speaking, ENIE 115 Listening, and ENIE 116 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements. Offered credit/no credit only. Open only to full-time IEI students.

**ENIE 111 - Writing Level 1 (1.5 TO 99)**
Focuses on advancing students' ability to express their thoughts and inquiries in written form by using an added tense and learning about sentence variety. Students will also develop the ability to appropriately use basic electronic written communication in the target language. Finally, students will begin pre-development of research skills by being encouraged through writing exercises to ask questions of interest and to label sources of information. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 112 - Grammar Level 1 (1.5 TO 99)**
Students continue to master simple verb tenses, basic parts of speech, and simple sentences. They are introduced to compound and complex sentences. Students also continue to learn how to ask and respond to questions appropriately. In addition, students are introduced to the different meanings of phrasal verbs, definite and indefinite nouns as well as adjective forms. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 113 - Reading Level 1 (1.5 TO 99)**
Designed to help students develop reading and vocabulary skills. The topics in this course are real-world topics related to culture, science, social studies, and so forth. Students will improve their reading comprehension, acquire dictionary skills to build vocabulary, and develop visual literacy. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 114 - Oral Communication Level 1 (1.5 TO 99)**
Designed to enhance students' speaking skills along with the other language skills. Among other things, students will be able to introduce themselves and others, respond appropriately to common classroom directives, and report (orally or in writing) events using more than 10 sentences. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 115 - Extensive Reading and Keyboarding 2 Level 1 (1.5 TO 99)**
Designed to enhance students' reading fluency and typing speed. Two readers will introduce students to cultural concepts. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 116 - Vocabulary and Literary Level 1 (1.5 TO 99)**
Focuses on vocabulary acquisition, including the pronunciation and spelling of the words on the Level 1 word list. Students continue to learn the IPA, increasing their knowledge of simple vowels and adding diphthongs and consonants. Offered credit/no credit only. A total of 99 credits may be earned.

**ENIE 120 - IEI Level 2 (9)**
A compilation of ENIE level 2 courses: ENIE 121 Writing, ENIE 122 Grammar, ENIE 123 Reading, ENIE 124 Speaking, ENIE 125 Listening, and ENIE 126 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements. Offered credit/no credit only. Open only to full-time IEI students.
ENIE 121 - Writing Level 2 (1.5 TO 99)
Teaches students to identify and write the following types of paragraphs: definition, description, process-analysis and opinion. Each of the writings should include all of the elements of a paragraph (i.e. topic sentence, supporting sentences and concluding sentence). They should also demonstrate correct spelling, accurate grammar, and a variety of sentence structures.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 122 - Grammar Level 2 (1.5 TO 99)
Introduces more complex concepts of English grammar, such as modals. Students begin to analyze their grammar choices instead of simply applying the appropriate rule.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 123 - Reading Level 2 (1.5 TO 99)
Focuses on increasing students' overall reading proficiency through reading practice of an authentic text. Students will also develop basic reading strategies such as using context and inflections in order to increase overall comprehension of a text and build on prior knowledge of a topic when reading.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 124 - Oral Communication Level 2 (1.5 TO 99)
Through open-ended, in-class group discussion and a variety of activities, students learn about general cultural behaviors, beliefs, and expectations in the U.S. The focus for this course is to guide students in becoming yet more familiar with and comfortable in a new culture and to aid them in becoming integral participants.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 125 - Extensive Listening 1 Level 2 (1.5 TO 99)
Students will improve both their discrete and global listening skills in this course. Students will watch American sitcoms and should understand the main idea/dilemma, produce a paragraph describing characters, and analyze politeness, formality, and gestures in the episodes.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 126 - Vocabulary and Literacy Level 2 (1.5 TO 99)
Using a graded reader, students will identify the main idea in a reading, use context to identify unknown vocabulary, and identify specific figures of speech, such as metaphors, similes, and personification. They should also be able to generate and answer questions about a text and summarize accurately.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 130 - IEI Level 3 (9)
A compilation of ENIE level 3 courses: ENIE 131 Writing, ENIE 132 Grammar, ENIE 133 Reading, ENIE 134 Speaking, ENIE 135 Listening, and ENIE 136 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

ENIE 131 - Writing Level 3 (1.5 TO 99)
Level 3 Writing is the introduction to the academic essay. Students learn the basic features of an essay and write two essay types: compare/contrast and a summary/response essay. They also are introduced to topics such as incorporating citations, summarizing, and paraphrasing. Students are expected to acquire more than a basic understanding of intellectual property as they learn these skills.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 132 - Grammar Level 3 (1.5 TO 99)
Students develop mastery in the interpretation and production of the tense-aspect system of English, paying particular attention to present perfect, present perfect progressive, and past perfect.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 133 - Reading Level 3 (1.5 TO 99)
Students in Level 3 engage in reading an authentic academic text as they use prior knowledge and comprehension strategies to understand the meaning. They also develop research skills by locating materials through CardCat.
Offered credit/no credit only.
A total of 99 credits may be earned.
ENIE 134 - Oral Communication Level 3 (1.5 TO 99)
Communicative speaking/listening course that focuses on higher-level usage of conversational skills such as interviewing and formal group discussions. Pragmatic issues such as politeness, especially in agreement and disagreement, are key outcomes of the course. This course reinforces many skills including grammar, logical structures from writing, and vocabulary.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 135 - Extensive Listening 2 Level 3 (1.5 TO 99)
Students will improve both their discrete and global listening skills in this course. Thus, the approach should be two-pronged, using both the text Sound Advice (which is very much oriented towards distinguishing sound changes in spoken American English) and using authentic listening clips from news reports.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 136 - Vocabulary and Literacy Level 3 (1.5 TO 99)
The key goals of this course are to broaden and deepen learners' working vocabulary (Level 3 word list) and develop reading fluency.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 140 - IEI Level 4 (9)
A compilation of ENIE level 4 courses: ENIE 141 Writing, ENIE 142 Grammar, ENIE 143 Reading, ENIE 144 Speaking, ENIE 145 Listening, and ENIE 146 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

ENIE 141 - Writing Level 4 (1.5 TO 99)
Provides students with the strategies and skills needed to write and edit a two-page cause and effect essay and a three-page argumentative paper. Focusing on critical thinking as a foundation of the writing process, students will learn to accurately paraphrase, summarize, and synthesize peer-reviewed articles and cite sources using APA style.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 142 - Grammar Level 4 (1.5 TO 99)
Focuses on grammatical features including the perfect and perfect progressive aspects, passive voice, relative clauses, and degree complements. Students continue to build on previous knowledge from earlier levels and work toward a better understanding in order to use the previous grammar rules in a meaningful way.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 143 - Reading Level 4 (1.5 TO 99)
Focuses on guiding learners through the process of using authentic academic textbooks and databases. Students learn to locate argumentative texts for future research projects; acquire the skills to evaluate the objectivity, credibility, and appropriateness of texts and cited sources; and develop reading strategies for understanding the structure and content of argumentative texts.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 144 - Speaking Level 4 (1.5 TO 99)
Students continue to learn and master the skills of participating in and leading academic classroom discussions in a culturally, pragmatically appropriate way. This is the last course to explicitly focus on these skills, so students should be confident in their discussion skills before completion of the course.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 145 - Listening Level 4 (1.5 TO 99)
Introduces students to academic lectures and teaches them the skills they need to comprehend their content. Students learn to use their notes to successfully answer both detail-level and "big-picture" comprehension questions about a lecture. They also learn strategies, such as interpreting non-verbal cues, which can aid in comprehension of a lecture.
Offered credit/no credit only.
A total of 99 credits may be earned.

ENIE 146 - Vocabulary and Literacy Level 4 (1.5 TO 99)
Focuses on improving reading fluency through reading a high-level abridged novel and mastering the Level 4 word list (part of the AWL). Students are expected to apply critical thinking skills to the texts.
Offered credit/no credit only.
A total of 99 credits may be earned.
ENIE 150 - IEI Level 5 (9)
A compilation of ENIE level 5 courses: ENIE 151 Writing, ENIE 152 Grammar, ENIE 153 Reading, ENIE 154 Speaking, ENIE 155 Listening, and ENIE 156 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements. Offered credit/no credit only. Open only to full-time IEI students.

ENIE 151 - Writing Level 5 (1.5 TO 99)
The primary goal is to teach students how to write a six-page argumentative research paper using a process approach that involves brainstorming, prewriting, database research, drafting, revising, and publication. Students also complete an annotated bibliography. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 152 - Grammar Level 5 (1.5 TO 99)
Students will build on their knowledge of previously learned structures and add more complex grammatical features such as sensory and causative verbs, modals of prediction and inference, and conditionals. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 153 - Reading Level 5 (1.5 TO 99)
Offers a rigorous continuation of Level 4 academic reading, emphasizing critical reflection. Students will guess the meaning of words in context, identify main ideas, and trace arguments. Students will also paraphrase, summarize, and interpret graphs/tables/charts to demonstrate comprehension. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 154 - Speaking Level 5 (1.5 TO 99)
Students learn about delivery and presentation skills as well as focus on creating strong content. In addition to the presentation focus, there is a pronunciation goal of improving intonation. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 155 - Listening Level 5 (1.5 TO 99)
The purpose of this course is to continue preparing students to comprehend academic lectures. While the course reinforces overall listening skills developed in Level 4, it introduces students to the abstract thinking skills that they need to assess and support arguments presented in academic lectures. They will also be expected to understand a lecture after hearing it once. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 156 - Vocabulary and Literacy Level 5 (1.5 TO 99)
Focuses on improving reading fluency and comprehension through reading a popular novel and mastering the Level 5 word list (part of the AWL). Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 160 - IEI Level 6 (9)
A compilation of ENIE level 6 courses: ENIE 161 Writing, ENIE 162 Grammar, ENIE 163 Reading, ENIE 164 Speaking, ENIE 165 Listening, and ENIE 166 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements. Offered credit/no credit only. Open only to full-time IEI students.

ENIE 161 - Writing Level 6 (1.5 TO 99)
Students will continue to learn and practice the various steps necessary to do effective research. The focus of this course is to write a well-supported and well-organized argumentative research paper of approximately 8-10 pages in length. Students will use library databases to search for sources, identify a research topic of their own, create an annotated bibliography, and write a literature review. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 162 - Grammar Level 6 (1.5 TO 99)
Focuses on more advanced grammar features including various finite and non-finite clauses; complex sentences; the verb system--tense, aspect, and voice; and determiners. Students will work on meaning and production while continuing to build on previous knowledge from past grammar courses. Students should also focus on self-correction and using the grammar learned in this course in authentic and meaningful ways. Offered credit/no credit only. A total of 99 credits may be earned.

ENIE 163 - Reading Level 6 (1.5 TO 99)
Students will practice critical reading with longer academic texts and apply reading strategies acquired in previous levels. They practice and develop advanced college reading skills (vocabs in context, main ideas, inference, argument, etc.) and analyze texts to trace different types of arguments.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 164 - Speaking Level 6 (1.5 TO 99)**
Focuses on both debate and pronunciation. The purpose of debate in this course is to help students develop critical argumentative and thinking skills. In addition to debate, students are encouraged to become aware of their own pronunciation difficulties and set their own goals for pronunciation improvement.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 165 - Listening Level 6 (1.5 TO 99)**
The purpose of this course is to provide instruction in advanced listening comprehension. The ability to take efficient and accurate notes of an academic lecture and use those notes to answer comprehension questions is a fundamental course outcome.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 166 - Vocabulary and Literacy Level 6 (1.5 TO 99)**
Focuses on improving reading fluency and comprehension through reading a BSU-selected freshman reader and mastering the Level 6 word list (part of the AWL).
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENIE 171 - Writing for Graduate Students Level 6 (1.5 TO 99)**
Students will continue to learn and practice the various steps necessary to do effective research. The focus of this course is to write a well-supported and well-organized argumentative research paper of approximately 8-10 pages in length. Students will use library databases to search for sources, identify a research topic of their own, create an annotated bibliography, and write a literature review.
Offered credit/no credit only.
A total of 99 credits may be earned.

**ENT - ENTREPRENEURSHIP**

**ENT 241 - The Entrepreneurial Experience (3)**
An introductory course focusing on the generation of innovative business ideas, the creation of business ventures, and the role of entrepreneurship within society. Presents the skills and process knowledge needed to create an innovative solution to a real-world market opportunity.

**ENT 244 - Social Entrepreneurship (3)**
Exploration of ventures started for social food, whether not-for-profit or for-profit. Examines implications of starting ventures for the greater good of society.

**ENT 341 - Opportunity Identification (3)**
Creatively identifying and developing an entrepreneurial opportunity through market feedback. Exploring an opportunity through interaction with potential customers and industry experts.
Prerequisite: ENT 241.
Open only to entrepreneurial management majors.

**ENT 342 - Marketing for New Ventures (3)**
A survey course covering principles of market research and marketing. Students will learn how to perform market research and test the demand for a product/service, determining its marketing feasibility. In addition, they will learn how to create a marketing plan that includes their decisions regarding product, promotion, price, and distribution.
Prerequisite: ECON 116 or ECON 201 or ACC 201 with a minimum grade of C; ENT 241.

**ENT 343 - Venture Leadership (3)**
Examines the importance of a holistic understanding of ventures, including strategy, management, operations, human capital, funding, stewardship, and financial management.
Prerequisite: ECON 116 or ECON 201 or ACC 201 with a minimum grade of C; ENT 241.

**ENT 345 - Management for New Ventures (3)**
A survey course highlighting the foundational principles and best practices for managing the start-up process and the human resources involved in new venture creation.
Students will learn how to plan the business launch and operations, as well as how to select, train, compensate, and promote employees.
Prerequisite: ECON 116 or ECON 201 or ACC 201 with a minimum grade of C; ENT 241 and ENT 342.
Prerequisite or parallel: ENT 343.

**ENT 346 - Product and Service Design (3)**
The product design aspect focuses on establishing product functionality, developing blueprints, listing parts and materials, and identifying specific manufacturing processes at the parts level. Service design aspect, where applicable, focuses on detailed service process design ranging from bundling of services with products to micro-level service process flows.
Prerequisite: ENT 341.
ENT 347 - Business Model Generation (3)
An interactive environment where students work with stakeholders on strategic perspectives and the development of an economically feasible business model towards the capstone project.
Prerequisite: ENT 346.
Open only to entrepreneurial management majors.

ENT 369 - Entrepreneurship Internship (3)
Job experience in an organization with an approved entrepreneurial company. Requires periodic reports that will be evaluated by the assigned faculty member and the intern?'s supervisor.
Prerequisite: ENT 241; permission of the department chairperson or internship supervisor.
Open only to entrepreneurial management majors.

ENT 441 - Entrepreneurial Decision Making (3)
Teams of students consult with organizations on specific problems or opportunities in such areas as production, marketing, financial analysis, and other related entrepreneurial or managerial issues. Students will be exposed to contemporary challenges in entrepreneurial management and asked to solve problems from real-world scenarios.
Prerequisite: ENT 347 and ENT 443.
Open only to entrepreneurial management majors.

ENT 443 - Venture Financing (3)
Examines the venture financing options available for new business startups. Emphasizes creating and analyzing financial documents, approaching financial sources, selling stock for growing companies, and managing the financial condition of a new venture.
Prerequisite: ENT 241, ENT 346; FIN 300.
Open only to entrepreneurial management majors.

ENT 449 - New Venture Creation (3)
Requires the development of a thorough business plan that must be approved by an external panel of executives and entrepreneurs.
Prerequisite: ENT 347 and ENT 443.
Open only to entrepreneurial management majors.

EURO 369 - Professional Experience (3)
Involves assigned duties in an organization, agency, corporation, or business dealing with European affairs, with appropriate monetary compensation.

EURO 401 - Special Issues in European Studies (3)
Investigation of a particular topic, problem, or issue relating to contemporary Europe with an emphasis on materials not covered in established courses. May include equivalent courses taken in European universities or in semester-length study abroad programs in Europe.
Prerequisite: permission of the program director.

EURO 405 - Independent Study (3)
Directed research supervised and graded by an appropriate faculty member in consultation with the program director. May involve independent field studies and short term study programs in Europe.
Prerequisite: permission of the program director.
Open only to juniors and seniors.

EURO 479 - Practical Experience (3)
Involves assigned duties in an organization, agency, corporation, or business dealing with European affairs, without monetary compensation.
Prerequisite: permission of the program director.
Not open to students who have credit in EURO 369.

EXSC 119 - Hatha Yoga (1)
Introduction to yoga postures, breathing, and relaxation techniques, including the therapeutic use of hatha yoga, its importance to the fitness/wellness profession, and the correct technique of teaching basic poses.
Exercise science majors may repeat only once.

EXSC 147 - Resistance Training Leadership (3)
Designed to help students gain understanding of resistance training and the muscles associated through practicum application. Students will provide guidelines and practical experience for instructing safe, effective and purposeful strength and conditioning through a pre-existing exercise program for apparently healthy participants.
Exercise science majors may repeat only once.

EXSC 148 - Group Fitness Instructor (1)
Develops practical knowledge and skills necessary to instruct group fitness programs through active participation.
Exercise science majors may repeat only once.
Open only to exercise science majors.
EXSC 190 - Foundations of Exercise Science (3)
An introduction to Exercise Science as a field of study. Topics will include a historical perspective, measurement methods, career options, related professional organizations and publications, physiological and psychological research, technology and research tools, professional development and standards, and other current information for wellness and fitness professionals.

EXSC 201 - Human Performance Concepts and Assessment (3)
An introduction to the knowledge and skills necessary to administer assessments of physiological components related to human movement and athletic performance. Exercise science majors may repeat only once.
Open only to exercise science majors and coaching minors.

EXSC 202 - Fitness Assessment in Exercise Science (3)
A laboratory-based course designed to introduce rationales and procedures of various health and fitness assessments, e.g. resting and exercise blood pressure, body composition, aerobic capacity, blood glucose and cholesterol, as well as implications of test results.
Lab fee required.
Exercise science majors may repeat only once.
Open only to exercise science majors.

EXSC 212 - Games and Activities for the Older Adult (1)
Designed to acquaint students with a variety of recreational activities suitable for the older adult. Prerequisite: any PFW course.

EXSC 292 - Anatomy (3)
Introduction to human anatomy. Provides basic knowledge upon which physiological biomechanical concepts can be built.

EXSC 293 - Foundations of Physiology and Exercise (3)
Presents an introduction to exercise physiology by providing a basic overview of systems physiology at rest, along with the acute responses and chronic adaptations in these systems that are brought about by exercise. Prerequisite: EXSC 292 or ANAT 201.

EXSC 294 - Functional Anatomy (3)
Focuses on understanding how structure of the human body determines its function, how movement is produced, the relationship to injury, and how exercise can maintain, rehabilitate, and improve body structure.

Exercise science majors may repeat only once.
Open only to exercise science, athletic training, and aquatics majors.

EXSC 301 - Fundamentals of Exercise Prescription (3)
Emphasizes the knowledge and skills necessary to effectively develop and implement an appropriate exercise prescription for adults. Exercise science majors may repeat only once.
Open only to exercise science and athletic training majors.

EXSC 302 - Physical Activity Throughout the Lifespan (3)
Designed to give an overview of recommended physical activity throughout various periods of one’s lifetime. This will include the role that physical activity plays throughout the lifespan in adults, children, older adults, athletes, clinical populations, clients with disabilities and others with special considerations. Offered on-line only.
Exercise science majors may repeat only once.

EXSC 310 - Applied Sports Performance (3)
Designed to give students the opportunity to observe and assist in the practical application of resistance training protocols for college athletes and teams. Students will observe and assist in guidelines and experience for instructing safe, effective and purposeful resistance training and conditioning by working with the head strength coach and staff. Students will observe college teams with the exception of Football. Prerequisite: EXSC 127 and EXSC 201; permission of the instructor.
Open only to exercise science majors.

EXSC 312 - Teaching Physical Activity to the Older Adult (2)
Designed to teach students to recognize the characteristics of the older adult and to successfully plan, implement, and evaluate a program of physical activity based upon the special needs of the older adult. Prerequisite: EXSC 212.

EXSC 320 - Fundamentals of Resistance Training (3)
Advanced knowledge in resistance training program design and implementation emphasizing the physiological and biomechanical aspects of resistance training. Prerequisite: EXSC 147 and EXSC 292 or ANAT 201 and EXSC 293. Open only to exercise science majors.
EXSC 329 - Program Development/Fitness Assessment for Individuals with Disabilities (3)
Designed to provide learning experiences associated with fitness assessment, program development in implementation for individuals with disabilities in a clinical setting. Recommended for exercise science, athletic training, and pre-physical therapy majors.
Prerequisite: EXSC 201 or permission of the instructor.

EXSC 360 - Exercise Psychology (3)
Introduction to the psychosocial issues related to exercise behaviors emphasizing intervention strategies. Covers information relevant to competencies related to effective exercise leadership as well as adherence methods and techniques for exercise participants.
Exercise science majors may repeat only once.
Open only to exercise science majors.

EXSC 401 - Principles of the Electrocardiogram (3)
Introduction to the basic principles and interpretation of the electrocardiogram (ECG) as it relates to clinical and fitness programs.
Exercise science majors may repeat only once.
Prerequisite: EXSC 293.
Open only to exercise science majors.

EXSC 402 - Advanced Fitness Assessments in Exercise Science (3)
An advanced laboratory-based course designed to introduce rationales and procedures of various health and fitness assessments, e.g. resting and exercise blood pressure, body composition, aerobic capacity, blood glucose and cholesterol, as well as implications of test results.
Open only to exercise science majors with advanced program status.

EXSC 414 - Biomechanics of Human Movement (3)
Application of fundamental biomechanical principles to the human musculoskeletal system. Topics include musculoskeletal mechanics and quantitative analysis of human movement.
Exercise science majors may repeat only once.
Prerequisite: EXSC 294.

EXSC 420 - Sports Performance (3)
Advanced knowledge in resistance training program design and implementation emphasizing the physiological and biomechanical aspects of sport performance.
Exercise science majors may repeat only once.
Prerequisite: EXSC 147 and EXSC 201.

EXSC 479 - Exercise Science Internship (12)
Full-time on- or off-campus practical experience in an exercise science-related program, e.g., cardiac rehabilitation, physical therapy, wellness/health promotion, sports medicine, corporate fitness, YMCA, etc. Enhances professional preparation by offering opportunities to apply fundamental concepts and principles in an actual work setting. Full time commitment required by student to complete requirement.
Exercise Science majors may repeat only once.
Prerequisite: Exercise Science majors must have completed all other required courses, 100 observation hours, Career Ready program, and satisfied all other retention standards required of the major (e.g. minimum grade point averages, etc.).
Open only to Exercise Science majors.

EXSC 493 - Advanced Concepts in Exercise Physiology (3)
The effect of exercise on the anatomical structures and the physiological functions in humans during acute and chronic activity.
Exercise Science majors may repeat course only once.
Open only to Exercise Science majors.

FASH - FASHION
FASH 101 - Dimensions of Clothing (3)
Analysis of dress and adornment emphasizing dimensions that affect the design and end uses of textiles and clothing.

FASH 102 - Fundamentals of Apparel Construction (3)
Basic knowledge of garment construction, clothing selection, and art principles as applied to clothing.

FASH 202 - Fitting and Intermediate Apparel Construction (3)
Study of garment fit: recognition and implementation of fit to patterns and garments. Learning and application of intermediate garment construction skills.
Prerequisite: FASH 102.

FASH 230 - Textiles for Apparel (3)
Study of textiles and their components (fiber, yarn, fabric, and finishes) as they relate to care, performance, quality, and customer satisfaction.
Prerequisite: CHEM 100.
FASH 265 - Fashion Illustration (3)
Provides basic knowledge of drawing of the fashion figure and of fashion illustration.

FASH 270 - The Fashion Industry (3)
A survey of the business of fashion through design, manufacture, distribution, and promotion. Explores career possibilities. Open to all students.

FASH 275 - Computerized Software and Presentation for the Fashion Industry (3)
Provides knowledge and skills in use of the common industry computer software for fashion design development and presentation. Prerequisite: FASH 102 for all majors; FASH 265 for apparel design majors only.

FASH 280 - Merchandising Fundamentals and Mathematics (3)
Study of fundamental quantitative issues related to fashion merchandising and retail management. Covers the basic mathematical computation used in the retail and wholesale markets. Incorporates computer skills used in fashion merchandising and retail management. Prerequisite: ISOM 125.

FASH 300 - Flat Pattern (3)
Adapting standard patterns to individual proportions, designing garments, and creating an original garment by the flat pattern method. Use of computer-aided design to produce pattern for original garment. Prerequisite: FASH 202.

FASH 303 - Draping (3)
Provides basic knowledge of apparel design using the draping method. Prerequisite: FASH 202.

FASH 304 - Grading and Marking for Apparel Design (3)
Provides basic knowledge of product processes of grading and marking for apparel. Computer grading and marker generation will be emphasized. Prerequisite: FASH 300.

FASH 315 - Fashion Product Analysis (3)
Study of factors which contribute to the quality of fashion-related merchandise. Provides an opportunity to become skillful in evaluating the materials and construction quality and techniques used in the textile and apparel industry.

FASH 345 - Visual Merchandising (3)
Study of visual merchandising presentations and sales promotion in fashion retailing and wholesaling. Basic principles of design, as applied to visual merchandising, are examined. Prerequisite: FASH 101 and FASH 270.

FASH 350 - Advanced Construction (3)
Students will recognize characteristics typifying high quality tailored garments and produce garments using advanced construction techniques. Application of appropriate techniques to construct a tailored garment. Provides experience in working in design and production teams. Prerequisite: FASH 300 or FASH 303.

FASH 360 - History of Costume (3)
A study of Western costume from its beginning to the present. Emphasis on motivating influences of each period as well as on the costume itself. Includes the study of historical fashion designers' contributions to fashion. Prerequisite: FASH 101 and FASH 230 and FASH 270.

FASH 365 - Study of Fashion Forecasting (3)
Provides an overview of the use of fashion forecasting to interpret trends for the fashion industry. Prerequisite: FASH 270.

FASH 384 - Fashion Retailing, Management, and Branding (3)
Study of the merchandising and management functions in the fashion industry. Philosophies and technologies used by fashion merchandisers and retailers are included. The role of merchandising is analyzed relative to market research, planning and control, pricing strategies, supply chain management, branding and sourcing. Prerequisite: FASH 270 and FASH 280.

FASH 392 - Professional Development for Fashion Merchandising (1)
Provides knowledge and skills in preparing for merchandising and buying careers in the fashion industry. Prerequisite: FASH 270 and FASH 280.

FASH 410 - Computerized Apparel Product Development (3)
Provides advanced knowledge of the use of computer skills in product development. Integration of design development skills in apparel design and illustration, apparel product
FASH 415 - Apparel Manufacturing and Wholesaling (3)
Study of garment manufacturing and the decision-making process involved in producing, marketing, and merchandising apparel and other fashion-related products. Prerequisite: FASH 102, and MKG 300 or ENT 342.

FASH 475 - International Apparel Markets (3)
Provides an overview of the global textile and apparel industries. Considers the U.S. textile complex and market within an international context. Prerequisite: FASH 230 and FASH 270; and MKG 300 or ENT 342.

FASH 480 - Studio Design: Senior Line (3)
Students will take on the role of a fashion designer through the conceptualization of ideas, to design components, to production, to presentation of their original line. Students will have the opportunity to develop their personal and professional design philosophy. Prerequisite: FASH 300 and FASH 303 and FASH 350.

FASH 481 - Fashion Promotion (3)
Study of promotional strategies used by fashion retailers and manufacturers. Emphasis on application of promotional strategies. Prerequisite: junior standing; FASH 270; FASH 480 for apparel design students.

FASH 488 - Fashion Buying, Merchandising and E-Commerce (3)
Gives future fashion retailers the knowledge base to make decisions on buying and merchandising in various retail environments (e.g. store, catalog, e-commerce, m-commerce) to satisfy the customer and maintain an adequate profit level. Demonstrates mathematical and computer skills in buying and merchandising through the development of a buying plan. Prerequisite: FASH 384 and MGT 300; and MKG 300 or ENT 342. Prerequisite or parallel: FASH 415.

FASH 495 - Seminar in Fashion (3)
Advanced examination of current topics in the fields of Fashion Merchandising and Apparel Design. Specific seminar content is announced when offered. Prerequisite: FASH 270 and junior standing or permission of the department chairperson.

FASH 497 - Portfolio Development for Fashion (1)
Provides the opportunity to compile a portfolio of design work and/or projects to be used for a job interview. Prerequisite: FASH 415; FASH 480 for apparel design students.

FCED - FAM & CON SCI EDUC
FCED 150 - Introduction to Teaching Family and Consumer Sciences Education in Secondary Schools (3)
An introduction to the process of becoming a Family and Consumer Sciences teacher in secondary schools. Through coursework and targeted clinical experiences, teacher candidates will begin to form their professional identities as future educators, develop a beginning knowledge base for teaching, and engage with the integration of technology throughout the learning process. They will observe, develop, and demonstrate initial core teaching practices.

FCED 261 - Assessment Methods for Teacher Candidates in Family and Consumer Sciences Education (3)
An assessment of methods used to maintain a positive learning environment are covered in this course. Assessment tools and strategies pertaining to student behavior, classroom layout, and measuring skills will be discussed, created and analyzed. Prerequisite: FCED 150.

FCED 392 - Principles and Philosophy of Vocational Education (3)
Applies the principles and philosophies of vocational education to program organization, content area, teacher qualifications, leadership preparation, curriculum design, and image.

FCED 395 - Methods and Materials for Teaching Family and Consumer Sciences (5)
Organization of teaching units and lesson plans; selection and use of teaching methods and materials. Prerequisite: identification to pursue a teaching curriculum. Prerequisite recommended: EDSE 380.

FCED 490 - Practicum in Family and Consumer Sciences Education (1 TO 3)
Individual or group studies and experiences. Experience with professional standards, regulations, and supervision in the work related to family and consumer sciences chosen by the student. Prerequisite: permission of the department chairperson. A total of 9 credits may be earned, but no more than 3 in any one semester or term.
FCED 492 - Implementation of Family and Consumer Sciences Education Programs (3)
Emphasizes techniques for implementing Family and Consumer Science education programs, including applications for learning styles, teaching methods, lesson plans, student clubs (FCCLA) and technology.
Prerequisite: FCED 261 or program approval.

FCED 493 - Coordination of Family and Consumer Science Programs (3)
Coordination and implementation of programs relating to the mission of Family and Consumer Sciences. Includes recruiting, selecting, and evaluating individuals; working with an advisory committee, role of the coordinator, selecting, creating and evaluating resources/curriculum for a variety of audiences, and implementing programs to a variety of audiences. Involves presentations in the community outside of class time.
Prerequisite: FCED 261 or program approval.

FCFC - FAM & CON SCI FAM & CHL

FCFC 450 - Consumer Education (3)
Economic considerations of purchasing and planning for consumers. Includes current consumer legislation, marketing conditions, influence of advertising, consumer credit, agencies that protect consumers, financial planning, e-commerce, and points to consider as consumers.
Open to all students.

FCFC 496 - Seminar in Family Relations (1 TO 3)
History and recent trends and developments in family-life education, career opportunities involved in family-life education, professional organizations, and ethical standards.
Prerequisite: permission of the department chairperson and junior or senior standing.
A total of 3 credits may be earned.

FCGI - FAM & CON SCI, GENERAL

FCGI 369 - FCS General Internship (3 TO 6)
Provides the opportunity for the student to work in an established internship setting to gain professional experience in one's specific area of study.
A total of 6 credits may be earned.
Open only to general family and consumer sciences majors who are juniors or seniors.

FCS 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles to be announced before each semester.
A total of 6 credits may be earned.

FCS 400 - Family and Consumer Sciences Field Studies (3 TO 6)
Provides the opportunity to visit and observe the application of knowledge in the field. Sites for field studies may be either domestic or international, and come from any area of family and consumer sciences.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

FCS 494 - Workshop: Family and Consumer Sciences (1 TO 3)
Activity-oriented study of one topic in family and consumer sciences.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

FCS 495 - Independent Study in Family and Consumer Sciences (1 TO 3)
Investigation and exploration of a topic in family and consumer sciences not offered as a class. Requires extensive reading and development of research skills.
Includes work with faculty who have expertise in the area of study.
Prerequisite: permission of the department chairperson.
A total of 9 credits may be earned, but no more than 3 hours in any one semester or term.

FCS 496 - Seminar in Family and Consumer Sciences (1 TO 6)
Seminar topics will be identified, focusing on current issues in the family and consumer sciences profession. Using the seminar format, the course will include research, discussion, and dissemination of information gathered on a given topic.
Prerequisite: junior or senior standing, permission of the department chairperson.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

FCS 497 - Immersive Learning Experience in Family and Consumer Sciences (1 TO 3)
Students, working as a member of an interdisciplinary team, engage in a directed immersive learning experience in Family and Consumer Sciences. Melds content, skills,
societal need, and student interests into an intense, real-world transformative experience that results in a tangible product. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**FIN - FINANCE**

**FIN 101 - Personal Finance for Fiscal Wellness (1)**
A structured collection of personal finance topics relevant to the needs of young adults: personal budgets and financial plans; services available for saving, borrowing, and insurance; and taxes. The importance of being fiscally informed in the transition from college to the workplace and planning for future financial goals are emphasized. Not open to students who have credit in FIN 110.

**FIN 110 - Personal Finance (3)**
The fundamental principles of general business and related economic concepts are considered from the consumer’s point of view. Some of the topics studied are consumer buying and the use of credit, banking, insurance, investment, budgeting, and taxation. Core Transfer Library: Professional/Occupational (IPO 1811).

**FIN 299X - Experimental/Developmental Topics (1 TO 6)**
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

**FIN 300 - Principles of Finance (3)**
Students will study the principles of financial management. Decisions to invest (capital budgeting), finance (cost of capital), manage on a daily basis (working capital management), and long-term planning will be the focus. Ethical, global, and technological issues, together with functional integration in business decisions will be discussed where appropriate. Prerequisite: C or better grade in ACC 201.

**FIN 301 - Intermediate Finance (3)**
Designed to provide the foundations for advanced courses in finance and valuation using a modeling framework. Prerequisite: FIN 300 and ECON 221.

**FIN 310 - Investments (3)**
Introduces financial investments such as stocks, bonds, mutual funds, and derivatives. The principles of diversification and trade-offs between risk and expected return are introduced. Efficient market hypothesis and portfolio theory are examined. Prerequisite: FIN 300.

**FIN 320 - Markets and Institutions (3)**
Examine the role of financial markets and institutions in the U.S. financial system. Emphasizes interest rates, the functioning of debt, equity and derivative security markets, and discusses the impact of technology, regulation, globalization, and product innovation. Prerequisite: FIN 300.

**FIN 352 - Global Finance (3)**
Financial problems and opportunities that confront the management of global firms. Sources and instruments of global finance, import and export financing, interrelationship of governmental and global agencies, and the current status of some. Prerequisite: FIN 300.

**FIN 369 - Internship in Finance (3 OR 6)**
Professional practice during a summer or semester as an intern in an approved program with a banking institution, business firm, or government agency for pay under the supervision of the finance department. Requires periodic written reports of job experience. Prerequisite: FIN 300; second-semester junior or senior standing; permission of the department chairperson. A total of 6 credits may be earned.

**FIN 410 - Portfolio Management (3)**
Advanced topics in investments including security analysis and portfolio management techniques, valuation and performance evaluation. Prerequisite: FIN 300 and FIN 310.

**FIN 420 - Treasury Management (3)**
Detailed study of short-term asset and liability management in a financial markets, instruments, institutions, and processes framework. Prerequisite: FIN 300 and FIN 320.

**FIN 445 - Financial Statement Analysis (3)**
Provides a conceptual framework for interpreting and analyzing financial statements by integrating accounting and financial concepts, and using this information to analyze and value businesses. Prerequisite: FIN 300.
FIN 480 - Financial Planning Process and Case Development (3)
Students will study the financial planning process; the ethical, legal, and regulatory environment; appropriate communication; the standards of professional conduct; and other topics of relevance in financial planning and decision making. Students will integrate employee benefits and retirement planning, investments, risk management and insurance, income taxes, and estate planning into a comprehensive financial plan.
Prerequisite: ACC 401 and BL 367 and FIN 310 and RMI 270 and RMI 330; or permission of the department chairperson.

FIN 490 - Decision Making in Finance (3)
Capstone course for finance majors focusing on decision making in different types of organizations. An integration of financial principles, techniques, and strategic issues.
Prerequisite: FIN 301 and FIN 310 and FIN 320.

FIN 497 - Independent Study in Finance (3)
Designed for academically qualified students who want to study some phase of finance. An intensive individualized program of reading, researching, or analyzing various finance topics under the guidance of a faculty member.
Prerequisite: FIN 301, FIN 410, FIN 420; senior standing; permission of the department chairperson.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

FL - FOREIGN LANGUAGES
FL 150 - Introduction to Teaching World Languages in Secondary Schools (3)
An introduction to the process of becoming a world language teacher in secondary schools. Through coursework and targeted clinical experiences, teacher candidates will begin to form their professional identities as future educators, develop a beginning knowledge base for teaching, and engage with the integration of technology throughout the learning process. They will also observe, develop, and demonstrate initial core teaching practices.

FL 205 - The French-Speaking World (3)
Survey of political, cultural, and literary history in areas colonized by France: Quebec, the Caribbean, North Africa, West Africa. Topics include geography, government, and differences in Francophone and Anglophone colonization, using socio-political and literary works.

FL 295 - Foreign Language Field Experience (1)
Early field experiences in local middle school and high school foreign language classes. Continued development of the digital teaching portfolio and creation of artifacts relating to language, culture, and stereotypes.
Prerequisite: FL 150; sophomore standing or permission of the department chairperson.
Open only to foreign language teaching majors.

FL 299X - Experimental/Developmental Topics (3 TO 12)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 12 credits may be earned.

FL 305 - Foreign Literatures in Translation (3)
Readings in English translation of selected works of major writers in one of the foreign languages taught in this department. Topics and works may vary.
May not be applied to foreign language majors or minors.

FL 306 - Foreign Culture through Films (3)
Study of cultures of the countries whose languages are taught in this department through the medium of foreign contemporary and classic films.
May not be applied to foreign language majors or minors.

FL 307 - European Women Writers (3)
Readings in English translation of selected works of major twentieth-century women writers in European languages.
Topics and works may vary.
May not be applied to foreign language majors or minors.

FL 308 - European Culture through Films (3)
Study of the cultures of European countries through the medium of films.
May not be applied to foreign language majors or minors.

FL 350 - Elementary World Language Teaching Methods (3)
Focuses on philosophy, approaches, methods, and materials needed to teach a world language in elementary school settings. Emphasizes teaching skill development, communicative language development, cultural awareness, performance-based assessment, state and national standards, technology, classroom management, field experiences, and continued portfolio development.
Prerequisite: EDPS 250 or EDPS 251; FL 295; two years of college credit or the equivalent in a modern or classical language and identification to pursue a teaching curriculum.
Open only to education majors or minors.
**FL 369 - Professional Experience (3 TO 12)**
Paid, supervised work experience integrating foreign and classical language skills with career-related positions in international firms, the travel industry, and local, state, and federal agencies. Work assignments may be part- or full-time for one or more semesters in approved cooperative education (co-op) or internship programs.
Prerequisite: a minimum of two years of university-level foreign language study and permission of the department chairperson.
A total of 12 credits may be earned.

**FL 390 - Honors Colloquium in Foreign Literature (3 TO 6)**
Selected readings and in-depth exploration and discussion of literary currents, movements, authors, and themes found in foreign literature.
Prerequisite: junior standing in the Honors College or permission of the department chairperson.
A total of 6 credits may be earned.

**FL 395 - Teaching Methods, Reading Strategies, and Materials for World Language (3)**
Current, best-practices methods in world language education focusing on integrated language and culture instruction, reading strategies, technology-enhanced language learning, standards-based planning and assessment, diverse learners, and materials development.
Review of current professional literature, trends, and licensing requirements.
Prerequisite: FL 396.
Parallel: EDSE 380.

**FL 396 - Technology and Assessment for World Language Education (3)**
Introduces theories and concepts for successfully integrating instructional technology and assessment in world language classrooms. Teacher candidates combine theory and practice to inform and enhance their teaching philosophies and methodologies. Includes evaluation of resources, preparation of instructional materials and instruments, and the articulation and integration of technology and assessment in curricula and instructional units.
Prerequisite: FL 295.
Parallel: EDJH 385.

**FL 470 - Immersive Study Abroad (1 TO 3)**
Immersive capstone study in another country of advanced language, literature or culture. May be taught in English or the language of the country.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

**FL 479 - Practical Experience (3 TO 12)**
Non-paid, supervised work experience integrating foreign and classical language skills with career-related positions in international firms, the travel industry, and local, state, and federal agencies. Work assignments may be part- or full-time for one or more semesters in approved cooperative education (co-op) or internship programs.
Prerequisite: a minimum of two years of university-level foreign language study; permission of the department chairperson.
A total of 12 credits may be earned.

**FR - FRENCH**

**FR 101 - Beginning French 1 (4)**
The first course in the French language. Core Transfer Library: World Languages (IWL 1901)

**FR 102 - Beginning French 2 (4)**
Core Transfer Library: World Languages (IWL 1902)
Prerequisite: FR 101

**FR 202 - Intermediate French 2 (3)**
Core Transfer Library: World Languages (IWL 1904)
Prerequisite: FR 201

**FR 301 - Conversation (3)**
Practice in oral French to increase fluency and authenticity through activities and conversation.
Prerequisite: FR 202 or the equivalent, or permission of the department chairperson.

**FR 302 - Composition (3)**
Practice in written French with review of grammatical structures.
Prerequisite: FR 202 or the equivalent.

**FR 303 - Grammar (3)**
An advanced study of French grammar, stressing creative expression in the language.
Prerequisite: FR 302 or its equivalent.
FR 334 - Civilization and Culture: The Old Regime (3)
Prerequisite: FR 202 or the equivalent, or permission of the department chairperson.

FR 335 - Civilization and Culture: Modern France (3)
Development of modern France from the French Revolution to the present. Assimilation of traditions into the culture of the industrial age. Supplemental literary selections.
Prerequisite: FR 202 or the equivalent, or permission of the department chairperson.

FR 337 - Phonetics (3)
Formation of speech sounds in the French language and the application of phonetics to the understanding and speaking of French. Use of the International Phonetic Alphabet.
Prerequisite: FR 202 or the equivalent, or permission of the department chairperson.

FR 338 - Business French (3)
Designed to make advanced French students familiar with commercial forms and terminology used in business, banking, and industry.
Prerequisite: FR 202 or the equivalent, or permission of the department chairperson.

FR 360 - Introduction to French Literary Readings (3)
Selected readings from several literary genres (e.g., drama, lyric poetry, narrative) drawn from various periods of French literary history; writing on selected literary topics.
Prerequisite: FR 202 or permission of the department chairperson.

FR 400 - French Study Abroad (3 TO 9)
Study of intermediate or advanced French language, literature, and culture in a foreign country where French is the native language. May include seminars arranged during travel.
A total of 9 credits may be earned.

FR 401 - History of French Literature 1 (3)
From the beginnings to 1760. Literature of the Middle Ages, the Renaissance, and the classical age to 1760.
Prerequisite: FR 202 or permission of the department chairperson.
Prerequisite recommended: FR 360 or its equivalent.

FR 402 - History of French Literature 2 (3)
From the classical age to the present. The development of eighteenth-century philosophies, romanticism, realism, naturalism, and symbolism in French literature; literature of modern France.
Prerequisite: FR 202 or permission of the department chairperson.
Prerequisite recommended: FR 360 or its equivalent.

FR 403 - Seminar in French Literature (3 TO 9)
Seminar studies by author, genre, period, or theme. Topic to be announced.
Prerequisite: FR 301, FR 302; or the equivalent, or permission of the department chairperson.
A total of 9 credits may be earned.

FR 404 - Seminar in French Language or Civilization (3 TO 9)
Seminar studies in grammar, style, conversation, or civilization. Topic to be announced.
Prerequisite: FR 301, FR 302; or the equivalent, or permission of the department chairperson.
A total of 9 credits may be earned.

FR 470 - French Immersive Study Abroad (1 TO 3)
Immersive capstone study of advanced French language, literature, and culture in a foreign country where French is the native language.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

FR 498 - Readings (1 TO 9)
Individualized reading or research to allow students to explore special topics with an individual instructor.
Prerequisite: FR 301, FR 302; or the equivalent.
A total of 9 credits may be earned.

GCM - GRAPHIC COMM MGT

GCM 180 - Graphics: Intro to Printing Processes (3)
Introduction to graphic communications through digital prepress, conventional and digital press, and postpress/finishing processes. Students develop fundamental skills through hands-on experience.

GCM 181 - Graphics: Impact Printing Processes (3)
Explores printing systems through the use of traditional printing processes. Focus will be on offset lithography, flexography, and gravure. Emphasis will also be placed on artwork preparation, image generation, platemaking, and presswork associated with these printing processes.
GCM 182 - Graphics: Digital Imaging (3)
Emphasizes the theoretical and practical applications of digital imaging technologies including Adobe Illustrator and Adobe Photoshop. Includes an in-depth look at vector and raster graphic file types as well as trapping, photo manipulation, color settings/corrections, color modes, and photo editing.

GCM 183 - Graphics: Screen and Specialty Graphics (3)
Studies screen and other specialty graphics operations and their relationships to various substrate materials. Includes screen printing, pad printing, and vinyl cutting. A focus is placed on production techniques, equipment requirements and usage, and capabilities in the area of screen and specialty graphics.

GCM 184 - Graphics: Computer Applications (3)
Examines and applies computer applications for design and graphic communications, including image illustration, manipulation, composition, and layout.

GCM 281 - Graphics: Ink and Substrate (3)
Focuses on inks, substrates, and ink-substrate interactions. Students also develop ink and paper testing skills which are essential in the graphic communications industry. Prerequisite: GCM 180, GCM 181, GCM 183, or permission of the instructor.

GCM 283 - Graphics: Packaging Technology (3)
Explores the effective use of packaging within graphic communications. Using current software specific to packaging, students will acquire an understanding of the process as images are created and applied to current packaging principles. Also includes the specific substrates and output processes.

GCM 285 - Graphics: Digital Prepress (3)
Focuses on the development of skills in pagination and file preparation for print and cross media graphics. Students will develop skills in Adobe InDesign while covering topics including: preflight, imposition, layout, print settings, fonts/typography, and print workflows.

GCM 286 - Graphics: Fundamentals of Photography (3)
Emphasizes design, exposure techniques, composition, basic digital image capture, and electronic image manipulation.

GCM 299X - Graphics: Experimental Topics (3)
Topics relevant to the discipline. Course titles will be announced before each semester. Prerequisite: permission of the School of Art director. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

GCM 369 - Graphics: Internship (3)
Emphasizes internal or external placement in a graphic communications workplace. Provides opportunities to integrate and apply course content to the workplace. Prerequisite: permission of the School of Art director. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

GCM 373 - Graphics: Packaging Construction and Design (3)
Advanced applications in packaging. CAD packaging software will be explored. Topics include design, sustainability, layout, and fabrication of structural materials, multi-content packages, specialty boxes, and point of purchase displays. Prerequisite: GCM 283 or permission of the instructor.

GCM 381 - Graphics: Color Management (3)
Focuses on the measurement, evaluation, and monitoring of color as it is transferred through various input and output devices. Both theoretical and practical applications will be covered with the opportunity for students to understand the complex variables within the area of graphic communications.

GCM 382 - Graphics: Advanced Digital Output (3)
Advanced study of digital imaging systems. Topics include the control and calibration of image creation as well as image output and proofing. Importance of current imaging standards will also be addressed. Prerequisite: GCM 285 or permission of the instructor.

GCM 383 - Graphics: Offset Lithographic Presswork (3)
Advanced study of lithographic printing designed to provide an understanding of the control, operation, and advancements of lithographic printing presses. Information for both web and sheet-fed operations will be included with emphasis on monitoring and controlling printing press characteristics. Prerequisite: GCM 181 or permission of the instructor.
GCM 385 - Graphics: Cross Media Communications (3)
Explores the multiple ways alternative media is used to promote communication goals. The creation and interpretation of these methods will provide important information that will allow students to understand how use of cross media publishing can improve return on investment of traditional print media.

GCM 386 - Graphics: Planning and Finishing (3)
Designed to provide an understanding of the requirements in today’s finishing operations. Covers the many aspects of mailing and fulfillment vital to today’s print operations. Also includes the specifications necessary to produce materials in a cost effective manner.

GCM 387 - Graphics: Applications of Commercial Photography (3)
Emphasizes color theory, digital editing software, and composition principles as they relate to product photography. Applications to commercial photography, lighting, and photographic studios will also be covered.
Prerequisite: GCM 286 or ART 231 or equivalent or permission of the instructor.

GCM 415 - Graphics: Problems in Graphic Communications (3)
Individual advanced study and experimentation in graphic communications.
Prerequisite: permission of the instructor. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

GCM 484 - Practicum in Graphic Communications (3)
Integration of graphic communications process, from design, to production of print products and services for clients. Emphasis is placed on managing the process and participating in a variety of roles utilizing skills learned in classes. These skills include: customer service, design and layout, time management, planning, press production/supervision, and quality control.
Prerequisite: permission of the School of Art director. A total of 9 credits may be earned, but no more than 3 in any one semester or term.

GCM 486 - Graphics: Advanced Management Systems (3)
Designed to cover the latest technologies in the facilitation and control of graphic information and distribution. Covers database management, variable data publishing, and digital rights management.
Prerequisite: senior standing, or permission of the instructor.

GCM 488 - Graphics: Cost Analysis (3)
An introduction to project workflow issues and estimating practices prevalent in the graphic communications industry. Emphasis is placed on computer-based estimating practices currently used in the industry today, which include estimating, scheduling, and cost analysis.
Prerequisite: senior standing, or permission of the instructor.

GCM 489 - Graphics: Quality Control and Automation (3)
Develops understanding and knowledge within the areas of quality control and automation through an in-depth exploration of control systems used in the graphic communications industry. Topics include total quality management, process control, industrial standards, workflow management and automation, etc.
Prerequisite: GCM 381 or permission of the instructor.

GCM 490 - Graphics: Capstone for Graphic Communications (3)
Focuses on emerging trends, processes, and technologies in the contemporary graphic communications industry. Students are required to complete a senior project related to graphic communications.
Prerequisite: permission of the School of Art director.

GEOG - GEOGRAPHY
GEOG 101 - Earth, Sea, and Sky: A Geographic View (3)
Selected aspects of the physical environment and their relationship to human occupancy of the earth.

GEOG 120 - Economic Geographies of Globalization (3)
A systematic approach to economic issues emphasizing local, regional, national, and global economic developments in the geographic setting.

GEOG 121 - Geography of the Cultural Environment (3)
Utilizes qualitative methods to investigate relationships between human culture and the environment. Spatial processes that bring about cultural diversity and change are stressed as well as the role of human activity in producing cultural landscapes. The formation of cultural landscapes over time and the impacts of globalization are emphasized.
GEOG 150 - Global Geography (3)
A basic survey course emphasizing geographic facts and
interdependencies between the developed and developing
world. Particular emphasis is given to physical and social
environmental interdependencies.

GEOG 240 - Maps and Spatial Reasoning (3)
A map is a complex graphic representation used as a
means of communication. Considerable knowledge must
be brought to the successful task of reading a map. This
course will introduce students to the fundamentals of maps
and spatial reasoning. It will acquaint students with the
nature and quality of information that maps convey and the
methods, techniques and technologies to produce and
analyze them.

GEOG 250 - Spatial Analytical Methods in Geography
(3)
Serves as a basic introduction to the quantitative methods
employed by geographers to describe, analyze and interpret
geospatial datasets. Lecture topics will include basic
descriptive statistics, hypothesis formulation and testing,
sampling strategies, geographical association and
correlation analysis, regression, and a multivariate
statistics overview.
Prerequisite: MATH 108 or MATH 111 or MATH 112 or
MATH 125 or MATH 132 or MATH 161 or MATH 162
or MATH 165 or MATH 166.
Open only to geography majors and minors.

GEOG 261 - Introduction to Sustainable Tourism (3)
Examines the history, components, and spatial structure of
tourism from an ethical standpoint in regard to
environmental, socio-cultural and economic impacts.
Introduces principles of sustainable tourism and their
application to various types of tourism and geographical
contexts.

GEOG 262 - Tourism Regions (3)
Examines locational patterns of various forms of tourism
and the main geographic characteristics of these
destinations. Analyzes spatial and temporal models and
flows and their economic, social, cultural, and
environmental impacts through selected detailed case
studies.

GEOG 265 - Introduction to Geographic Information
Systems (3)
Fundamentals of geographic information systems (GIS). How
to visualize information in ways that reveal
relationships, patterns, and trends not visible in other
software systems. Develop working knowledge of the full
capabilities of GIS technology.

GEOG 270 - Geography of International Conflict (3)
Focuses on contemporary armed conflicts, including
culture-based conflicts and competition among nations for
economic and mineral resources; treats territorial disputes
from a cultural and geographic perspective. Case studies
vary to illustrate types of contemporary conflicts.

GEOG 299X - Experimental/Developmental Topics (1
TO 6)
Topics relevant to the discipline. Course titles will be
announced before each semester.
A total of 6 credits may be earned.

GEOG 320 - Immigration and Ethnic Geographies of
the United States (3)
A systematic upper division course which introduces the
geographical aspects of immigration and ethnicity in the
United States, particularly with regard to the post-1965
ethnic groups from Latin America and Asia. Specific
attention is given to concepts of immigration theory,
identity, race, transnationality, and community formation
within the larger context of human geography.

GEOG 321 - Urban Geography (3)
Distribution, classification, structure, and function of urban
centers. Special attention is given to the geographic
conditions affecting urban development and growth.

GEOG 323 - Tourism and Geography of Food (3)
Surveys the origin, spatial diffusion, and cultural ecology
of food crops and agriculture in the context of tourism and
travel. Examines the globalization of regional foods as a
cultural commodity and agricultural landscapes as tourist
attractions.

GEOG 340 - Cartography and Visualization of Spatial
Data (3)
Introduction to cartographic methods for the visualization
and analysis of geographic phenomena. Principles of
design are stressed with particular emphasis on methods
for symbolizing point, line, and area elements, and the
principles and use of color in cartography. Produce
publication quality maps using industry standard software.
Prerequisite: GEOG 240.

GEOG 341 - Cartography and Visualization of Spatial
Data 2 (3)
Advanced techniques of cartographic production with
emphasis on data representation and design for thematic
mapping. Statistical methods for manipulating and
symbolizing ordered spatial data are stressed. Topics
covered include data classification, available inventories of
data bases, and methods of interpolation. Techniques
studied include dot, choropleth, proportional symbol, and
isarithmic mapping.
Prerequisite: GEOG 250, GEOG 340.

**GEOG 342 - Introduction to Remote Sensing (3)**
Principles of remote sensing and its applications on earth
resources. Topics include the physics of remote sensing,
aerial photo interpretation, photogrammetry, multispectral,
hyperspectral, thermal infrared remote sensing,
RADAR/LIDAR, remote sensing of vegetation, water, and
soils.

**GEOG 343 - Advanced Remote Sensing (3)**
Digital image processing techniques utilized to analyze
remotely sensed data. Topics include remote sensing data
collection, image pre-processing, image enhancement,
image classification, post classification analysis, and multi-
temporal data analysis for change detection.
Prerequisite: GEOG 342.

**GEOG 344 - Advanced Geographic Information
Systems Analysis (3)**
Examination and use of analysis techniques in geographic
information systems (GIS). Introduction to basic GIS
programming. Diagramming GIS logic and processing
flows. Exposure to widely used GIS data models.
Prerequisite: GEOG 240, GEOG 265; or permission of the
instructor.

**GEOG 350 - Geography of the United States and
Canada (3)**
Comprehensive survey of geographic regions, settlement,
land use, natural resources, and potentialities of the United
States and Canada.

**GEOG 351 - Geography of Latin America and the
Caribbean (3)**
Physical and cultural patterns in a diverse world region.
Emphasizes population and settlement, agriculture, and
environmental hazards in the context of development.

**GEOG 353 - Geography of Indiana (3)**
A geographic examination of the physical, cultural, and
economic diversity of the state. Field experiences
supplement classroom activities.

**GEOG 354 - Geography of Asia (3)**
The geography of South, Southwest, Southeast, and East
Asia. A survey and analysis of the physical geographic
patterns, bases of cultural diversity, and changing spatial
aspects of political organization.

**GEOG 356 - Geography of Russia and Its Neighbors (3)**
Geographic analysis of the locational, environmental,
economic, and cultural diversity of the successor countries
to the Soviet Union. Regional examination of Russia,
Baltic, and other East European countries, Transcaucasia
and Central Asia.

**GEOG 357 - Geography of Europe (3)**
Examines the changing physiographic, climatic, economic,
and political environments of Europe. While addressing
the entire European cultural area, from the Atlantic Ocean
in the west, to the Ural and Caucasus mountains in the east,
primary emphasis is given to countries of Western,
Northern, Southern and Central Europe.

**GEOG 360 - Tours and Meetings Management (3)**
Introduces principles, strategies, and techniques applicable
in planning and operational stages of tours, meetings, and
other organized forms of travel and tourism, both leisure
and business oriented. Faculty supervised practical field
experience in tour planning and conducting. Lab fees.
Prerequisite: GEOG 261, GEOG 262.
Open only to geography concentration 2 majors and
minors, or by permission of the instructor.

**GEOG 369 - Professional Experience (3 TO 6)**
Paid full- or part-time work experiences with an
organization allied to a student's area of specialization.
Assignments depend on student interests and the sponsor's
convenience. Used for paid work experience only.
Prerequisite: permission of the department chairperson.
A total of 6 credits may be earned.

**GEOG 423 - Population Geography (3)**
A systematic and regional analysis of areal patterns of
population distribution, composition, migration, and
growth, as well as their causes and the effects they have on
the cultural landscape.

**GEOG 443 - Seminar in Advanced Techniques in
Remote Sensing (3)**
Advanced techniques applied to remotely sensed data
using state-of-the-art software. Review of current methods
of computer and manual interpretation techniques. Includes
active participation in classroom presentations.
Prerequisite: GEOG 342, GEOG 343.
GEOG 444 - Advanced Cartography and Visualization of Spatial Data (3)
Advanced course in interactive, multimedia, and animated cartography stressing the increasingly important role of digital cartography in cyberspace. Techniques are introduced for the creation of interactive products that facilitate the transformation of raw geospatial data into meaningful geographic knowledge. Projects are selected within the student's area of interest.
Prerequisite: GEOG 341.

GEOG 445 - Geographic Information Systems Applications Design and Development (3)
Fundamentals of geographic information systems (GIS) programming. Develop and implement customized GIS applications. Exposure to widely used GIS software programming environments.
Prerequisite: GEOG 265, GEOG 344, or permission of the instructor.

GEOG 448 - Geographic Information System Design (3)
Principles of geographic information system (GIS) design. Implementation of GIS technology. Database and user-interface design. Practical experience applying advanced GIS tools to analyze spatial data. Workshop format requires student motivated projects.
Prerequisite: GEOG 344.

GEOG 460 - Travel and Tourism Consulting (3)
Familiarization with and assessment of various travel products and their distribution channels. Development of skills in problem solving and task functions such as: information gathering, promotion, reservation, and ticketing. Laboratory computer experience. Industry approved entry-level travel agent certification optional.
Prerequisite: GEOG 261, GEOG 262.
Open only to geography concentration 2 majors and minors, or by permission of the instructor.

GEOG 470 - Political Geography (3)
Problems and issues surrounding the geographic distribution of political actions and outcomes in the context of globalization. Topics include war and peace, access to natural resources, nationalism, democratization, terrorism, and the politics of identity.

GEOG 479 - Practical Experience (3 TO 6)
Full- or part-time work experience with an organization allied to a student's area of specialization. Assignments depend upon student interests and the sponsor's convenience. Used for non-paid work experience only.
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

GEOG 480 - Distant Areas Field Studies (1 TO 6)
Physical, economic, and cultural geography in areas distant from the campus.
Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned, but no more than 6 in any one semester or term.
Open to students in geography, earth science, and allied subjects.

GEOG 491 - Sustainable Tourism Development (3)
Discusses how to develop tourism destinations and activities that integrate sustainable economic development, accessibility, and indigenous cultural evolution with minimal impact on the environment. Includes site assessment, financial analysis, market forecasting, and impact assessment.
Prerequisite: GEOG 261, GEOG 262; or permission of the instructor.

GEOG 495 - Readings and Special Studies in Geography and Earth Science (1 TO 6)
Assigned special studies in geography and earth science, including readings, research projects, teaching problems, or assignment to an undergraduate class.
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

GEOL - GEOLOGY
GEOL 101 - Planet Earth's Geological Environment (3)
Introductory study of the materials, structure, and surface features of the earth; the processes responsible for their development; geologic hazards; and the application of geologic knowledge to mankind's environmental and resource problems. Core Transfer Library: Physical Sciences (IPS 1730).

GEOL 105 - Laboratory in Physical Geology (1)
Practical study of minerals, rock, planimetric and topographic maps, fold and fault structures, geological maps, climate change, earthquakes, flooding, sustainability; local field trip. An introductory high school or college earth science course.
Prerequisite: an introductory high school or college earth science course; permission of the department chairperson.

GEOL 110 - Age of the Dinosaurs (3)
Discussion of the dinosaurs, their classification, their relationship to the environment, their geographic
distribution, and their geologic record. Special emphasis on new theories about dinosaur ecology, behavior, and extinction.

**GEOL 201 - Earth, Life, and Time (3)**
Introduction to the geologic history of the Earth's dynamic systems in relation to the development of the modern environment. Regularly scheduled laboratory. 
Prerequisite: any UCC Tier 1 course in the Natural Sciences Domain or permission of the department chairperson.

**GEOL 204 - Natural Landscape Expertise for Storytellers, Artists, and World-Builders (3)**
Provides storytellers, game masters, artists and designers with a rich scientific knowledge base on natural landscapes, emphasizing material most likely to be useful in creative applications. Topics include realistic landscape characteristics, diverse and unusual landforms in regional context, active landscape-sculpting processes, and striking natural alterations of landscape over time.

**GEOL 206 - Oceans and Nations (3)**
Worldwide human interactions with the oceans and international conflicts of interest related to the marine environment. Introduction to oceanography, marine law, resource conflicts, pollution, cooperation for research and hazard response, and other topics. 
Credit does not count toward the geology minor.

**GEOL 207 - Environmental Geology - Geophysical Geochemical Cycles (3)**
Explores the geochemical cycling in the interior of the Earth and its effects on surface processes, the cycling of components crucial for humans and life in general such as water, carbon, and nitrogen, and the geologic cycling of hazardous chemicals such as heavy metals. Regularly scheduled laboratory. 
Prerequisite: CHEM 111; GEOL 101; or high school equivalents, or permission of the department chairperson.

**GEOL 220 - Earth Materials (3)**
Principles of crystallography and mineralogy and the relationships of minerals to the composition and types of rocks of the earth's crust. Laboratory work concerned with crystallographic operations and the identification of minerals by physical and chemical properties. Regularly scheduled laboratory. 
Prerequisite: GEOL 101; or permission of the department chairperson. 
Prerequisite or parallel: CHEM 111 or permission of the department chairperson.

**GEOL 240 - Geomorphology (3)**
Study of landforms and the earth surface processes that shape them. Effects of geology and climate on landscapes sculpted by weathering, mass movements, rivers, groundwater, volcanism, tectonics, wind, and waves throughout the world. Regularly scheduled laboratory; overnight field trip. 
Prerequisite: GEOL 101 or high school equivalent or permission of the department chairperson.

**GEOL 290 - Computer Applications in the Geosciences (1)**
Survey of the various computer applications in the geosciences. Designed to supplement existing geoscience and computer science courses by providing opportunity to gain experience in working with software programs in various geoscience data-collecting, calculation, and graphic display applications. 
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

**GEOL 299X - Experimental/Developmental Topics (1 TO 6)**
Immersion or experiential topics relevant to the discipline. Section titles will be announced before each semester. 
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

**GEOL 302 - Global Positioning System Techniques (1)**
Global Positioning System (GPS) surveying and mapping techniques. Overview of satellite and system technology, examination of various GPS units available for applications, techniques using units individually or in combination for mapping and navigation, differential GPS methods, use in computer-generated maps. 
Prerequisite: permission of the department chairperson. 
A total of 3 credits may be earned, but no more than 1 in any one semester or term.

**GEOL 308 - Sedimentary Geology (3)**
An introduction to the study of sedimentary rocks and processes. Sedimentary rock description, depositional environments, and the application of stratigraphic methods. Regularly scheduled laboratory and a field trip. 
Prerequisite: GEOL 201 or permission of the department chairperson.

**GEOL 310 - Igneous and Metamorphic Petrology (3)**
Origin and description of igneous and metamorphic rocks. Incorporates information on recent advances in our
understanding of these rocks. Provides an overview of the
field of petrology and a solid foundation for more
advanced studies.
Prerequisite: GEOL 220 or permission of the department
chairperson.

GEOL 315 - Structural Geology, Tectonics and Basic
Field Methods (4)
Designed to give middle- and upper-level students an
introduction to rock-deformation theory, structural
geochemistry, and tectonics. Looks at microscopic to
macroscopic deformation of rock in the Earth's lithosphere
and basic field mapping techniques. Associated field trips.
Prerequisite: GEOL 201, GEOL 220; MATH 112 or
equivalent, or permission of the department chairperson.

GEOL 330 - Geological Field Tour (1 TO 6)
Rocks, structure, fossils, landforms, environmental
geochemistry, economic resources, and geologic history of a
specific region, investigated mainly in the field. Individual
course offerings specify geographic region of focus, any
on-campus class meeting component in addition to the
extended field trip, and student assignments/evaluation.
A total of 12 credits may be earned, but no more than 6 in
any one semester or term.

GEOL 350 - Physical Hydrology (3)
Fundamental physical and chemical principles governing
the occurrence and circulation of water at and near the
Earth's surface. A quantitative approach is taken to
mathematically describe hydrological phenomena, such as
open channel flow and surface water hydraulics.
Prerequisite: GEOL 240.

GEOL 369 - Professional Experience (1 TO 4)
Paid professional work and learning experience arranged
during one or more semesters or summers. Eligible
students will be placed in an approved agency or private
business. Assignments, including activity log, self-
analysis, and summary report, are supervised by the
department.
Prerequisite: permission of the department chairperson and
the coordinator of internships.
A total of 4 credits may be earned.

GEOL 383 - Field Geology (6)
A capstone experience applying field techniques to the
resolution of geologic problems. Group and individual
projects include accumulation and interpretation of field
observations and preparation of geologic maps, cross
sections, and stratigraphic sections to answer geologic
questions. Five-week summer field course in the Rocky
Mountains.
Prerequisite: GEOL 201, GEOL 220, GEOL 240, GEOL
290, GEOL 308; or permission of the department
chairperson.

GEOL 409 - Micropaleontology (3)
Morphology, classification, preparation techniques, and
evolution of paleontologically significant microfossil
groups and their biostratigraphic and paleoecologic
significance. Emphasizes foraminifera, conodonts, and
ostracodes. Regularly scheduled laboratory. Includes an
immersion experience.
Prerequisite: GEOL 308 or permission of the department
chairperson.

GEOL 411 - Advanced Igneous and Metamorphic
Petrology (3)
Processes responsible for, and the rocks and minerals
associated with, the formation of both igneous and
metamorphic rocks. Microscopic to macroscopic features
associated with these processes. Regularly scheduled
laboratory.
Prerequisite: GEOL 220, GEOL 310 or permission of the
department chairperson.

GEOL 412 - Sedimentary Petrology (3)
A petrographic approach to the classification and genetic
interpretation of sedimentary rocks. Terrigenous
sandstones and carbonate rocks will be emphasized with
lesser stress on mud rocks and non-carbonate chemical
rocks.
Prerequisite: GEOL 201, GEOL 220, GEOL 310 or
permission of the department chairperson.

GEOL 413 - Experimental Petrology (3)
Students are introduced with several experimental
apparatuses that are designed to simulate the behavior of
Earth's materials at different P-T conditions. Student will
learn various heterogeneous phase equilibria that are of
interest to geologists. Students are expected to learn how to
construct various phase diagrams and to apply appropriate
melting systems to model the formation of solid Earth and
the other terrestrial bodies.
Prerequisite: GEOL 310.

GEOL 416 - Geology of Hazards and the Environment
(3)
Applied geology for hazard and environmental problems.
Properties and mechanics of rocks and soil; geologic
materials in construction; erosion, mass wasting,
subsidence; flooding, shoreline, seismic, volcanic, and
other natural hazards. Dams, tunnels, mines, shoreline structures, and other special construction problems; groundwater engineering problems.
Prerequisite: an introductory course such as GEOL 101, GEOL 207, GEOL 240; NREM 211 or EMHS 352; MATH 108 or high school equivalent, or permission of the department chairperson.

**GEOL 420 - Oceanography (3)**
Description of geological and physical characteristics of the oceans, marine processes, and related topics.
Prerequisite: CHEM 111; GEOL 201, GEOL 207; or permission of the department chairperson.

**GEOL 425 - Geophysics (3)**
An intensive survey of the study of properties of earth materials. The focus is on the first principles that govern geophysical properties, and the techniques used to measure those properties.
Prerequisite: MATH 161 or MATH 165, and PHYC 110, or permission of the department chairperson.

**GEOL 434 - Applied Biostratigraphy (3)**
Advanced undergraduate course designed to provide practical experience in geologic problem solving in energy and oceanographic fields. Intended as an advanced elective which will provide an immersion opportunity for geology and earth science majors. Focused on the use of microfossils to solve correlation and paleoecological problems, primarily in the subsurface. Run as a semester length course (usually during the fall semester) and involves work in the Ball State University Biostratigraphy Laboratory.
Prerequisite: GEOL 409 or permission of the instructor.

**GEOL 435 - Sequence Stratigraphy (3)**
Principles and practices of sequence stratigraphy. Use of surface and subsurface stratigraphic data in the reconstruction of depositional sequences and records of sea-level change. Includes an immersion experience.
Prerequisite: GEOL 308 or permission of the department chairperson.

**GEOL 440 - Karst Environments and Carbonate Geology (3)**
A study of a portion of the global carbon cycle that includes an intensive survey of karst aquifers and landscapes as well as the geology of the carbonate rocks in which the karst forms. Planned topics will include carbonate depositional environments, carbonate petrology and diagenesis, speleogenetic theories, karst hydrology and geochemistry, karst geomorphology, and environmental/engineering challenges in karst.
Prerequisite: GEOL 207, GEOL 240.
Not open to students who have credit in GEOL 540.

**GEOL 461 - Hydrogeology (3)**
An intensive survey of the physical properties of groundwater flow and the classic literature of aquifer studies.
Prerequisite: GEOL 350, and MATH 161 or MATH 165, and PHYC 110, or permission of the department chairperson.
Not open to students who have credit in GEOL 560.

**GEOL 462 - Environmental Geology in the Field and Laboratory (3)**
Provides development of research projects and instruction in field and laboratory techniques used in the collection and analysis of field samples. The techniques are applied to the study of local environment research projects and may include instruction on well probes and standard “wet” chemical techniques.
Prerequisite: GEOL 207, GEOL 461 or GEOL 560.

**GEOL 470 - Groundwater Geochemistry (3)**
Introduces the processes controlling the composition of natural waters; streams, lakes, oceans, and near-surface groundwaters. Focuses on the effects of human activities, biological systems, and inorganic geochemistry processes on water chemistry.
Prerequisite: CHEM 111, CHEM 112; GEOL 101; or permission of the department chairperson.

**GEOL 471 - Volcanology and Volcanic Hazards (3)**
Designed to give middle- and upper-level students a working knowledge of the causes and effects of the various types of volcanism ranging from quiescent Hawaiian-style volcanoes to the explosive SW Pacific volcanoes. In addition, looks at volcanic prediction, monitoring, and hazard response programs.
Prerequisite: GEOL 201 or permission of the department chairperson.

**GEOL 475 - Glacial Geology (3)**
An in-depth study of the physical nature of glaciers, their deposits, and the erosional and depositional landforms they create. Introduction to glacial history of the north-central United States. Term paper required.
Prerequisite: GEOL 240; PHYC 110 or PHYC 120; or permission of the instructor.
GEOL 480 - Special Studies and Field Problems (1 TO 3)
Selected detailed geologic problems studied under the guidance of a qualified instructor. Designed to provide specialized knowledge beyond the standard curriculum. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

GEOL 485 - Group Field Research Experience (3 TO 6)
Mentored, intensive, independent and/or collaborative research experience in a group setting, at an off-campus location. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term. Not open to students who have credit in GEOL 585 same topic.

GEOL 499X - Experimental Elective Course (1 TO 6)
Experimental new specialty course in the geological sciences. Topic and mode of instruction vary by semester of offering. A total of 9 credits may be earned, but no more than 6 in any one semester or term. Not open to students who have credit in GEOL 599X same topic. Open only to students with at least junior status.

GER - GERMAN
GER 101 - Beginning German 1 (4)
Introduction to vocabulary and structures needed for basic communication in German. Core Transfer Library: World Languages (IWL 1920)

GER 102 - Beginning German 2 (4)
Continuing study of vocabulary and structure needed for communication in German. Core Transfer Library: World Languages (IWL 1921) Prerequisite: GER 101 or its equivalent.

GER 201 - Intermediate German 1 (3)
Study of more advanced vocabulary and structure needed for communication in German. Core Transfer Library: World Languages (IWL 1922) Prerequisite: GER 102 or its equivalent.

GER 202 - Intermediate German 2 (3)
Reading of representative German authors of moderate difficulty. Review of grammar needed for reading and writing German. Core Transfer Library: World Languages (IWL 1923) Prerequisite: GER 201 or its equivalent.

GER 301 - Conversation (3)
Extensive practice in oral German and in German grammar to increase fluency and communicative skills in the language. Prerequisite: GER 202 or the equivalent, or permission of the department chairperson.

GER 302 - Composition (3)
Extensive practice in written German with review of grammatical structure of the language. Prerequisite: GER 301 or permission of the department chairperson.

GER 303 - Grammar (3)
Advanced, in-depth study of German grammar and stylistic expression. Prerequisite: GER 302 or permission of the department chairperson.

GER 334 - Contemporary German Culture (3)
Lectures, readings, and audiovisual materials introducing present-day social mores of Germany. Comparison of American and German cultures. Taught in English. Not for German major or minor credit except by permission of the department chairperson.

GER 335 - Civilization and Culture (3)
Civilization and cultural development of the Germans from ancient times to the present. Taught in German. Prerequisite: GER 202 or the equivalent, or permission of the department chairperson.

GER 337 - Phonetics (3)
Formation of speech sounds in the German language and the application of phonetics and phonemics in the understanding and speaking of German. Use of the International Phonetic Alphabet. Prerequisite: GER 202 or the equivalent, or permission of the department chairperson.

GER 338 - Business German (3)
Designed to make advanced German students familiar with commercial forms and terminology used in business, banking, and industry. Prerequisite: GER 202 or the equivalent, or permission of the department chairperson.
COURSES

GER 361 - Survey of German Prose (3)
Selections from German-language prose, short stories, and novellas designed to develop an appreciation of the literary heritage of German-speaking countries.
Prerequisite or parallel: GER 301.

GER 362 - Survey of German Drama (3)
Selections from German-language dramatic texts designed to develop an appreciation of the literary heritage of German-speaking countries.
Prerequisite or parallel: GER 301.

GER 363 - Survey of German Lyric (3)
Selections from German-language poetry, folksongs, and ballads designed to develop an appreciation of the literary heritage of German speaking countries.
Prerequisite or parallel: GER 301.

GER 400 - German Study Abroad (3 TO 9)
Study of intermediate or advanced German language, literature, and culture in a foreign country where German is spoken as a native language. May include seminars arranged during travel.
A total of 9 credits may be earned.

GER 401 - History of German Literature (3)
The course will give an overview of German-language literature, culture, and politics. It will highlight works from various periods, engage in discussions about literature, and encourage students to think and re-think the significance of literary production beyond the confines of the written word. Readings, discussions, and essays in German.
Prerequisite: GER 301 and GER 302

GER 402 - History of German Literature 2 (3)
German literature from early to late nineteenth century. The development of nineteenth-century philosophies, romanticism, and realism.
Prerequisite: GER 202 or the equivalent.

GER 403 - History of German Literature 3 (3)
From the late nineteenth century to the present, from naturalism to the literature of modern Germany.
Prerequisite: GER 202 or the equivalent.

GER 404 - Seminar in German Literature and Culture (3)
This advanced course is intended to enhance students’ knowledge of the literature of target culture(s). Emphasis will be placed on developing a critical understanding of
literary texts, such as poems, dramas, short stories, novels, essays, films, etc., of the target culture(s).
Prerequisite: GER 301 and GER 302 or permission of the department chairperson.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

GER 405 - Seminar in German Language and Linguistics (3)
This advanced course is intended to enhance students’ knowledge of the linguistics of the target language. Emphasis will be placed on developing a critical understanding of the linguistic topics, such as syntax, morphology, semantics, but also variations of German such as specific dialects or Pennsylvania German etc.
Prerequisite: GER 301 and GER 302 or permission of the department chairperson.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

GER 470 - German Immersive Study Abroad (1 TO 3)
Immersive capstone study of advanced German language, literature, and culture in a foreign country where German is the native language.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

GER 498 - Readings (1 TO 9)
Individual reading or research to allow students to explore special topics with an individual instructor.
Prerequisite: GER 302 or the equivalent.
A total of 9 credits may be earned.

GERO - GERONTOLOGY

GERO 392 - Workshop in Applied Gerontology (1 TO 6)
Preservice or inservice education in selected areas of applied gerontology using a workshop or independent study format of concentrated study, presentation, demonstration, and practice. Specific content depends upon the problems or interest area the format addresses. Learners are encouraged to work out programs of personal study with help from other resource persons.
Prerequisite: permission of the program director.
Credit may be applied to the minor in gerontology only with permission of the program coordinator.
A total of 6 credits may be earned.
GERO 398 - Topical Seminar in Applied Gerontology (1 TO 6)
Investigation of topics, problems, or issues in applied gerontology with discussion by all seminar participants under the guidance of the instructor.
Credit may be applied to the minor in gerontology only with permission of the program coordinator.
A total of 6 credits may be earned.

GERO 415 - Technology in Aging (3)
Explores the impact of assistive and other technologies on the lives of aging adults. Identification of technologies, utilization by and for aging adults, and implications for service delivery will be explored.

GERO 430 - Aging Well: Adaptations in Later Life (3)
Examination of adaptations of last half of the life span. Includes various theories of aging, multidimensional perspectives on changes in well-being and health, and strategies for coping with the change. Emphases are placed on developmental process, adaptations, and mental/emotional changes as people age.

GERO 435 - Aging in Communities (3)
Focus on community aging as it applies to all dimensions of life: biological, physiological, sociological, psychological, political, occupational, economical, educational, familial, and societal.

GERO 440 - Women and Aging (3)
Typical lifespan occurrences that largely impact women such as elder caregiving, familial systems maintenance, widowhood, health changes, and economic issues will be explored. Historical and theoretical perspectives; introduction to health, psychological, and living issues; introduction to racial and ethnic diversity; and social relationships will also be covered.

GERO 445 - Health, Wellness, and Aging (3)
Will increase knowledge of health, wellness, and aging covering topics such as health status, health behavior, health risk factors, clinical preventive services, public health, and job opportunities in health and aging.

GERO 499 - Internship in Gerontology (1 TO 6)
Experience in one or more of the agencies, institutions, or programs now providing gerontological services or otherwise related to the field of gerontology. The internship is carried out under the joint supervision of the program director for gerontology and a practitioner representing the agency, institution, or program. Each student chooses the internship setting with guidance from a faculty sponsor and approval of the practitioner.
Prerequisite: permission of the program coordinator.
A total of 6 credits may be earned.

GRK - GREEK
HIST - HISTORY

HIST 100 - Introduction to American History (3)
Overview of the major themes in the American historical experience from its origins to the present, with emphasis on turning points and recurring issues. Especially recommended for students pursuing a major in elementary education.
Not open to students majoring in history.

HIST 150 - The West in the World (3)
A survey of the development of Western Civilization since its origins emphasizing problems, turning points, and recurring themes, especially since circa 1500. Focuses also on the way global interactions helped shape Western Civilization.

HIST 151 - World Civilization 1 (3)
A survey of the development of world civilization from the dawn of civilization in Southwestern Asia and North Africa to the early modern world.

HIST 152 - World Civilization 2 (3)
A survey of the development of world civilization from the early modern world to the present.

HIST 198 - Studies in Non-Western Civilizations (3)
Examination of a broad range of patterns and problems found in the Middle East, Asia, Africa, and Latin America with emphasis on recent and contemporary development. Topics vary among political, economic, and social issues of major importance.

HIST 200 - Introduction to History and Historical Methods (3)
Introduction to the different fields of history, significant concepts in historical analysis, research methods and sources, and trends in historical interpretation.
Students must register for HIST 200 before completing 15 credits in the major.
Open only to history (concentrations 1 and 2) and social studies teaching majors.

HIST 201 - American History, 1492-1876 (3)
Survey of the political, diplomatic, economic, cultural, and sociological forces and adjustments that have affected the
history of the United States to 1876. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1010)

**HIST 202 - United States History, 1877 to the Present (3)**
Survey of the political, diplomatic, economic, cultural, social, racial, ethnic, and gender issues and key related events that have affected the history of the United States since 1877. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1011)

**HIST 204 - American Environmental History (3)**
Designed to give students knowledge of resource use in the United States. Government policies and private enterprise practices of exploitation and conservation from settlement to the present are treated in historical perspective. Emphasizes the way resource use has shaped society. Not open to students who have credit in NREM 204.

**HIST 205 - Introduction to Sport in American Life (3)**
A thorough examination of the various historical, sociological, and psychological features of sports in our society. Not sport-appreciation oriented, but rather an examination of what occurs to both competitors and spectators as they become involved with a sport activity. Not open to students who have credit in SPTA 205.

**HIST 210 - Introduction to Black History (3)**
Explores the history of black people in the United States from the slave trade to the present, with particular emphases on the ways that black Americans' aspirations for freedom and equality have been articulated, realized, and challenged.

**HIST 215 - Women in American History (3)**
An introduction to the study of women in American history; considers the social and economic status of women at various times, changing conceptions of their roles, attitudes toward women, women's ideas about themselves, and the women's rights movement.

**HIST 235 - Historical Topics in Film (3)**
Examines depictions of the past in film and the influence of historical perspectives and evidence on filmmakers and audiences. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**HIST 240 - Introduction to Public History (3)**
An overview of opportunities for nonteaching history-related careers in preservation, archival work, records management, museology, historical editing, living history and public parks programs, corporate history, and others. Students make a concentrated study of at least one field of public history and have contact with working professionals. Open to all students.

**HIST 299X - Experimental/Developmental Topics (3)**
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**HIST 301 - The United States and the Vietnam War (3)**
Historical analysis of American involvement in Vietnam from 1945 to 1975, with discussions of the military, political, diplomatic, and social effects of the war. Includes background information on Vietnamese history as well as its continuing legacy.

**HIST 303 - Oral History Workshop (3)**
Teaches oral history research methods, focusing on procedures for conducting long-form interviews with eye-witnesses to or contemporaries of past events, preparing verbatim transcripts of these formal conversations, and preserving the audiovisual recordings.

**HIST 310 - Introduction to the History of Business in the United States (3)**
Examines events in American business history from colonial times to the present, with emphasis on the 20th and 21st centuries.

**HIST 318 - History of the American West (3)**
Survey of the history of the U.S. West, a region of Native North America that has been the object of Spanish, French, English, and American expansionism, and finally a distinct region with a unique relationship to the U.S. federal government. Explores the U.S. West as both a shifting geographic region, and as a frontier process involving migration, political and social expansion, and cultural change.

**HIST 320 - A Laboratory Course in American History (3)**
Uses documents and manuscripts to teach the nature of history and historical research. Students learn through their own research how the historian defines topics of research; selects sources, both primary and secondary; evaluates materials; and describes the findings.
**HIST 324 - Topics in Latin American History (3)**
Examines in depth a particular aspect of the interaction of Amerindian, African, and Iberian cultures with their natural environment, and with each other, in the Western Hemisphere.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**HIST 338 - United States Urban History (3)**
Examines the inner dynamics of American cities and their place in the history of the United States. Gives students an historical perspective and acquaints them with historical methods of examining cities.

**HIST 360 - Selected Topics in Military History (3)**
Survey and investigation of a particular period, topic, or issue in military history with emphasis on materials not covered in established courses. Exact content will be announced in advance of each offering.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**HIST 369 - Public History Internship (3 TO 12)**
The public history internship provides a for-credit, supervised, on-the-job experience in a public history field that closely aligns with the student's professional career goals.
A total of 12 credits may be earned.

**HIST 370 - Foundations of Asian Civilization (3)**
Survey of South, Southeast, and East Asian history from earliest times to roughly a.d. 1600, with special focus on the development of Asian societies and cultures before any significant European presence.

**HIST 371 - Tradition, Conflict, and Change in Modern Asia (3)**
Survey of South, Southeast, and East Asian history from roughly a.d. 1600 to the present, with concentration on the problems, leaders, and issues that resulted from Western presence, nationalism, independence, and modernization as well as contemporary issues.

**HIST 372 - Africa Since 1500 (3)**
Stresses the emergence of modern African civilization from roughly 1500 to the present, with particular emphasis on regions south of the Sahara.

**HIST 373 - History of the Middle East (3)**
Provides in-depth knowledge and understanding of the Middle East--today's Egypt, Iran, Iraq, Israel, Lebanon, Turkey, and other states--since Muhammed. Stresses indigenous societies and how they have dealt with Islam, imperialism, nationalism, development, and wars.

**HIST 390 - Honors Colloquium in History (1 TO 3)**
Exploration of selected issues, themes, problems, or interpretations with emphasis on individualized study and reporting.
Restricted to honors students; others may enroll by permission of the department chairperson.
A total of 3 credits may be earned.

**HIST 400 - Colonial America, 1492-1763 (3)**
Explores the history of colonization in North America from the late fifteenth through the mid-eighteenth centuries, focusing on the seventeenth- and eighteenth-century English/British colonial experience.

**HIST 401 - Revolutionary America, 1763-1800 (3)**
Explores the history of the American Revolutionary era and the creation and development of the early United States, from 1763-1800.

**HIST 405 - Pre-Civil War America, 1800-1848 (3)**
Examines key social, cultural, economic, and political developments that shaped U.S. history between 1800 and 1848.

**HIST 407 - American Civil War and Reconstruction, 1848-1877 (3)**
Survey, analysis, and discussion of events, leaders, and movements, with special emphasis on causes, interpretation, and historiography of the period of national crisis and war followed by national reconstruction.

**HIST 409 - An Age of Reform: The United States in the Gilded Age and Progressive Era (3)**
Examines key developments in U.S. history during the Gilded Age and Progressive Era (circa 1877-1919), with special attention to reform efforts.

**HIST 410 - African American Studies Capstone (1)**
In this course, students who have completed their coursework for the African American Studies minor will write a final reflection on their experience in the program. Using selected assignments from throughout their coursework as a starting point, students will discuss how their studies within the minor have shaped their thinking, how it relates to their primary major(s), and how it may benefit them in the post-collegiate world.
Prerequisite: Students must have completed all other minor requirements, or be concurrently completing final requirements in the same semester.
HIST 411 - The American People in Prosperity, Depression, and War (3)
Explores the history of the United States and its people from the closing days of World War I through the culmination of World War II. Particular attention is paid to the era's profound shifts in the political, economic, and cultural lives of Americans, and to the nation's changing relationships with its citizens and the world.

HIST 413 - Post-World War II America (3)
Explores the history of the United States and its people since the end of the Second World War. Particular attention is paid to the various (and sometimes competing) visions of rights and freedoms that diverse sets of Americans expressed, internal changes to the country's politics, cultures, and economy, and external challenges in the ways the nation engaged with the wider world.

HIST 414 - Seminar in Middletown Studies (3)
Focuses on two works by the Lynds, Middletown and Middletown in Transition, and more recent studies about Muncie, Indiana.

HIST 415 - History of Indiana (3)
Exploration, colonization, and development of the state from the earliest time to the present.

HIST 416 - Pre-Civil War South, 1776-1861 (3)
Examines key social, cultural, economic, and political developments that shaped the American South prior to 1865, with an emphasis on 1815-1861.

HIST 417 - History of the New South (3)
Reconstruction, industrial and agricultural progress, social life, and the new leadership after 1865.

HIST 421 - American Indians in Colonial and U.S. History (3)
Survey of Indian and white relations from 1492 to the present, focusing on the Indian wars, treaty making, various types of Indian and white interaction, and the development of federal and state Indian policy.

HIST 422 - Topics in the History of Popular Culture (3)
Examines topics related to the growth and historical importance of popular culture, and the influence of popular culture on the study of history. As a topical course, it may cover any society, geographical area, or chronological period. Instructors will define their topics and the elements of popular culture to be studies in their individual syllabi.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

HIST 423 - Topics in Religious History (3)
Examines selected topics in religious history, with an emphasis on comparative and thematic approaches to the historical study of religion.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

HIST 424 - Topics in Race, Ethnicity, and Immigration (3)
Examines the history of immigration, the experiences of minority groups, and changing conceptions of race and ethnicity. Different sections of the class may examine different countries, groups, regions, and/or the interplay among them.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

HIST 425 - Topics in the History of the American West (3)
Examines in depth a particular aspect of the history of the American West, such as the region's Native peoples, frontier colonial experiences, exploration and expansion, environmental history, global connections, comparative frontiers, religious history, legacy of violence, the development of the mythic West, and public memory and commemoration in the West.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

HIST 426 - Topics in African History (3)
Survey and investigation of a particular topic or problem in African history with emphasis on issues, specialties, and materials not covered in other courses.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

HIST 427 - Topics in Asian History (3)
Survey and investigation of a particular topic, problem, or issue in Asian history with emphasis on topics, specialties, and materials not covered in other courses. Exact content will be announced before each offering.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

HIST 429 - Topics in the History of Gender and Sexuality (3)
Examines selected topics in the history of gender and sexuality. Topics will vary from semester to semester.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Geographical and chronological focus will vary according to the expertise of the instructor. A total of 6 credits may be earned. Open only to students who have completed 30 credits or more.

**HIST 430 - United States Diplomatic History to 1914 (3)**
History of United States diplomacy from the late colonial period to the eve of World War I.

**HIST 432 - United States Diplomatic History Since 1914 (3)**
Survey of the foreign relations of the United States since the outbreak of World War I.

**HIST 440 - Senior Research Project (1)**
An historical inquiry culminating in a capstone project that demonstrates command of historical research methods, prepared under faculty supervision.
Prerequisite: senior standing, permission of the department chairperson and instructor.
Open only to history majors.

**HIST 441 - Comparative Slavery (3)**
Explores the types of bondage, unfree labor systems, and slavery and the slave trade throughout African history as well as in a number of geographical regions for comparison. Includes Africa, the Mediterranean, the Caribbean, and Central and South America.
Prerequisite: HIST 150 or permission of the department chairperson.
Open only to history majors.

**HIST 445 - History and Historians (3)**
Historiography: the major historians and the writing of history from Thucydides to the present.

**HIST 446 - History in the Digital Age (3)**
Prepares students to employ and understand a wide variety of current and emerging digital technologies used in history and the humanities. Students will study the development of the relationship between the discipline of history and computing tools over time through a combination of theoretical and hands-on activities that explore the key ideas and events leading to the recent digital turn in the humanities. No digital experience is assumed.

**HIST 447 - Public History Practicum (3)**
Locate, access, analyze, organize, synthesize, evaluate, and apply information about selected public issues - identification, description, and evaluation of multiple points of view as explored by museums.

**HIST 449 - American Culture Field Studies (3 OR 6)**
American culture, its art, economic life, educational systems, geography, history, industry, languages, music, and society. Students travel through designated areas in North America. Requires considerable reading before the trip and papers at the conclusion. With departmental approval, secondary social studies teacher-education students may apply 3 credits to the appropriate category. A total of 6 credits may be earned.

**HIST 450 - Reading and Special Study (1 TO 3)**
Topics for independent study and research to be chosen and investigated in consultation with an instructor possessing special competence in the area involved.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

**HIST 452 - Women in Modern European History (3)**
Survey of women's experiences in modern European history. Examines the impact of major socio-cultural, political, and economic developments upon their lives; attitudes toward women's social roles; and their diverse attempts to change their social, political, economic, and sexual status.

**HIST 454 - The Era of World War I, 1870-1918 (3)**
Survey of the background, immediate causes, and the course of the First World War with stress on nationalism, the alliance system, imperialism, militarism, national aspirations, power rivalries, wartime operations, and peace plans.

**HIST 455 - The Era of World War II, 1918-1945 (3)**
The origins, immediate causes, and the course of World War II with emphasis on the peace settlement of 1919, revisionism, appeasement, diplomatic conflicts, military campaigns, and the foundations of the postwar world.

**HIST 456 - Europe Since 1945 (3)**
An examination of the major political, diplomatic, military, economic, and social developments that have shaped European history since the end of World War II.

**HIST 461 - Development of Greek Civilization (3)**
Examination of Greek political institutions, society, religion, and intellectual life in the Hellenic and Hellenistic periods. Emphasizes the study of Greek forms of democracy and other contributions to Western civilization and culture.
HIST 462 - Development of Roman Civilization (3)
Political, social, and intellectual development of Rome from the beginning of the republic to approximately a.d. 500. Emphasizes the development of the characteristics of the Romans during the republic and the effect on them of Greek ideas and world domination.

HIST 463 - Medieval Civilization (3)
Political, social, and cultural developments of Europe from the late Roman Empire through the thirteenth century, with special emphasis on the history of medieval thought and art. Material covered in this course is basic for any further work in medieval history.

HIST 464 - Development of Byzantine Civilization (3)
Survey of the political, socioeconomic, and intellectual development of the Byzantine Empire from its beginnings to 1453, with special emphasis on Byzantine religious and cultural contributions and relations with the European and Muslim worlds.

HIST 467 - The Renaissance and Reformation, 1300-1600 (3)
Specialized study of the crises, changes, and cultural achievements of Europe in an age of transition. Emphasizes such major topics as the late medieval crises, Italian and northern Renaissance thought and art, the religious crisis of the sixteenth century, and political, social, and economic problems of Renaissance Europe.

HIST 469 - World Civilizations--Field Studies (3 OR 6)
Studies in world civilizations--their history, art, economic life, educational systems, geography, industry, languages, music, and society--through varied travel programs. Advance reading and a summary paper complement each year's travel program and are required. With departmental approval, secondary social studies teacher-education students may apply 3 credits to the appropriate category. A total of 6 credits may be earned.

HIST 470 - Senior Seminar (3)
An investigation in some depth of a historical topic, culminating in an individual capstone project that demonstrates command of 1) historical research methods; 2) the relevant scholarly literature; 3) historical interpretations and analysis; and 4) historical writing. Topics will vary by section and will be announced in advance by the instructor. Required of all concentration 1 majors. Prerequisite: completion of HIST 200; and senior standing or permission of the department chairperson.

Open only to history concentration 1 majors.

HIST 471 - France Since 1789 (3)
An examination of the major political, diplomatic, military, economic, and social developments that have shaped French history since the French Revolution of 1789.

HIST 475 - Britain, 1485-1714 (3)
A survey of the political, social, and economic history of England in the Tudor and Stuart periods. Emphasizes the rise of the national state, religious conflicts, the development of the power of Parliament, and overseas exploration and colonization.

HIST 476 - Britain, 1760 to the Present (3)
Examines key social, cultural, economic, and political developments in British history from 1760 to the present.

HIST 481 - Modern Germany (3)
Experiences of the German people during the critical periods of national unification under Bismarck, the First World War, changing cultural and intellectual life, the Hitler and Nazi era, World War II, and the recent division of West and East.

HIST 482 - Cultural History of the Celtic Peoples from Prehistory to the Present (3)
Surveys the cultural history of the six modern Celtic countries (Brittany, Cornwall, Ireland, Isle of Man, Scotland, and Wales) and their ancient continental forebears, including major political events, literature, social organization, and traditional oral culture.

HIST 483 - Irish History (3)
 Covers all of Irish history from pre-Christian Celtic times to the present, including political events, literature (both oral and written), the role of language, music, folklore, and other elements of Irish cultural history.

HIST 484 - Southern Africa (3)
Explores the arrival of the Europeans in the southern tip of Africa from 1652 and focuses on the subsequent four centuries of colonial domination of much of the southern African continent. Also investigates Black, Indian, and colored resistance.

HIST 486 - Russian Civilization before 1917: From Kievan Rus to Imperial Russia (3)
Surveys the political, social, and cultural history of Russian civilization from its origins in the ninth century under the first political organization of the East Slavic
tribes, known as Kievan Rus, to the collapse of the Russian Empire in March 1917.

**HIST 487 - Soviet and Post-Soviet History (3)**
Surveys the political, social, and cultural history of the Soviet Union within the broader context of events before and after the breakup of the USSR to the present.

**HIST 491 - Topics in Middle Eastern History (3)**
Selected issues and problems in the Middle Eastern world since Muhammed. Topics may include the expansion of Islam, slavery in the Middle East, the economic and social history and the Ottoman empire, the Arab/Israeli dispute, and recent national and international crises.

**HIST 493 - History of Pre-modern East Asia (3)**
Examines pre-modern East Asian politics, cultures, and social issues from earliest times to approximately 1800 through inter-regional and comparative frameworks.

**HIST 495 - Modern China, 1600 to the Present (3)**
Descriptive and analytical survey with emphasis on China's changing role as a member of the world community, its response to increased Western contacts, disintegration of traditional order, revolutionary changes through the Republic of China and the People's Republic, and significant elements of contemporary Chinese society and culture.

**HIST 496 - Modern Japan, 1600 to the Present (3)**
Descriptive and analytical survey with emphasis on Japan's changing role as a member of the world community, its response to increased Western contacts, disintegration of traditional order, revolutionary changes through the Republic of China and the People's Republic, and significant elements of contemporary Chinese society and culture.

**HIST 497 - Selected Topics in European History (3 TO 6)**
Survey and investigation of a particular topic, problem, or issue in European history with emphasis on topics, specialties, and materials not covered in other courses. Exact content will be announced before each offering. A total of 6 credits may be earned.

**HIST 499 - Selected Topics in American History (3 TO 6)**
Survey and investigation of a particular topic, problem, or issue in American history with emphasis on topics, specialties, and materials not covered in other courses. Exact content will be announced before each offering. A total of 6 credits may be earned.

**HONR - HONORS**

**HONR 100 - Freshman Seminar (1)**
Orientation to Honors College and the college experience, guided by an upper-division Honors College student. Discussion of the common freshman reader. Introduction to university and Honors College resources, policies, and expectations. Development of major-specific curriculum plans. Offered credit/no credit only. Open only to freshman Honors College students.

**HONR 189 - Inquiries in Global Studies (3)**
Interdisciplinary exploration of the commonalities and diversities in global culture, economy, history, politics, and society; emphasizes the non-European, non-North American world. Open only to Honors College students.

**HONR 199 - Inquiries in Contemporary American Civilization (3)**
Interdisciplinary exploration of one or more critical issues that confront the modern United States, such as race, poverty, education, or family. Open only to Honors College students.

**HONR 201 - Inquiries in the Ancient World (3)**
Interdisciplinary exploration of the foundations of Western Tradition in the Ancient World, through their major intellectual, artistic, and cultural achievements. Incorporates the breadth of the humanities (e.g., literature, philosophy, and the fine arts). Open only to Honors College students.

**HONR 202 - Inquiries in the Middle Ages, Renaissance, Enlightenment (3)**
Interdisciplinary exploration of major intellectual, artistic, and cultural achievements of the Middle Ages, Renaissance, and Enlightenment. Incorporates the breadth of the humanities (e.g., literature, philosophy, and the fine arts). Open only to Honors College students.

**HONR 203 - Inquiries in the Nineteenth, Twentieth, and Twenty-first Centuries (3)**
Interdisciplinary exploration of major intellectual, artistic, and cultural achievements of the nineteenth, twentieth, and twenty-first centuries. Incorporates the breadth of the humanities (e.g., literature, philosophy, and the fine arts). Prerequisite: HONR 201 or HONR 202. Open only to Honors College students.
HONR 296 - Inquiries in the Physical Sciences (3)
Study of introductory principles within the physical sciences, emphasizing the relationships of the sciences to human concerns and society. Study of social and ethical consequences of scientific discoveries and their applications to critical issues confronting contemporary society.
Open only to Honors College students.

HONR 297 - Inquiries in the Earth Sciences (3)
Study of introductory principles within the earth sciences, emphasizing the relationships of the sciences to human concerns and society. Study of social and ethical consequences of scientific discoveries and their applications to critical issues confronting contemporary society.
Open only to Honors College students.

HONR 298 - Inquiries in the Life Sciences (3)
Study of introductory principles within the life sciences, emphasizing the relationships of the sciences to human concerns and society. Study of social and ethical consequences of scientific discoveries and their applications to critical issues confronting contemporary society.
Open only to Honors College students.

HONR 299X - Inquiries in Special Topics (0 TO 6)
Exploration of special topics relevant to Honors learning. Titles will be announced before each semester. May be repeated for different topics.
Prerequisite: permission of the dean of the Honors College.
A total of 99 credits may be earned, but no more than 6 in any one semester or term.
Open only to Honors College students.

HONR 300 - Leadership Seminar (0 TO 1)
Development of communication, leadership, and facilitation skills; exploration of relevant documents and additional resources.
Offered credit/no credit only.
Prerequisite: permission of the dean of the Honors College.
A total of 4 credits may be earned, but no more than 1 in any one semester or term.
Open only to Honors College sophomores, juniors, and seniors.

HONR 310 - Honors Foreign Study (1 TO 18)
Study in a foreign country appropriate to Honors learning. Course work undertaken at institutions of higher learning in other countries is granted Ball State University Honors College credit.
Prerequisite: permission of the dean of the Honors College.
A total of 99 credits may be earned, but no more than 18 in any one semester or term.
Open only to Honors College students accepted in a Ball State exchange or study abroad program.

HONR 350 - Medallion Scholar Special Study (1 TO 15)
Supervised independent or interdisciplinary study designed to meet the goals of an approved Medallion Scholar program of study.
Prerequisite: permission of the dean of the Honors College.
A total of 15 credits may be earned.
Open only to approved Medallion Scholars.

HONR 369 - Honors Professional Experience (1 TO 6)
Paid supervised work and learning experience related to honors education.
Prerequisite: permission of the dean of the Honors College.
A total of 6 credits may be earned.
Open only to Honors College students.

HONR 390 - Honors Colloquium (1 TO 6)
Exploration of selected issues that explore a single topic in depth or connect subjects or disciplines. Emphasis is on discussion, individual projects, and ways of combining information from several sources.
May be repeated for different topics.
Prerequisite: permission of the dean of the Honors College.
A total of 99 credits may be earned, but no more than 6 in any one semester or term.
Open only to Honors College students who have completed at least two of HONR 189, HONR 199, HONR 201, HONR 202, HONR 203, HONR 296, HONR 297, HONR 298.

HONR 400 - Honors Candidate (0)
May be taken each semester by honors candidates who have already registered in previous semesters for all of their undergraduate course work, including HONR 499, but have not yet completed their senior honors projects. Students enrolled in this course are entitled to ordinary undergraduate student use of library, health, and other university facilities.
Prerequisite: HONR 499.
Open only to Honors College students.
HONR 450 - Medallion Scholar Advanced Study (1 TO 9)
Supervised advanced independent or interdisciplinary study designed to meet the goals of an approved Medallion Scholar program of study.
Prerequisite: permission of the dean of the Honors College.
A total of 9 credits may be earned.
Open only to approved Medallion Scholars.

HONR 479 - Honors Practical Experience (1 TO 6)
Unpaid supervised work and learning experience related to Honors education.
Prerequisite: permission of the dean of the Honors College.
A total of 6 credits may be earned.
Open only to Honors College students.

HONR 490 - Independent Study or Research (1 TO 3)
Independent study with an individual instructor on topics not currently available in the curriculum or engage in further study or research on topics arising from previous work.
Prerequisite: 9 credits in HONR or permission of the dean of the Honors College.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.
Open only to Honors College students.

HONR 499 - Senior Honors Project (3)
An inquiry or creative project whose culmination includes an honors paper, prepared in accordance with accepted standards of documentation and presentation and supervised by a faculty member.
Prerequisite: permission of the dean of the Honors College.
Open only to Honors College seniors and those students completing the requirements for departmental honors.

HOSP-HOSP-FOOD-MGT
HOSP 105 - Hospitality and Foodservice Industry (1)
An overview of the hospitality and foodservice profession. An in-depth analysis of the industry including diversity and challenges, the academic preparation required, identification of the role of the hospitality and foodservice manager, and the multiple career options.
Open only to hospitality and food management majors and food management and hospitality management minors.

HOSP 110 - Principles of Food Preparation and Food Science (3)
Introduces the principles of food preparation and food science. Correct techniques and methods of food preparation are stressed.

HOSP 147 - Foodservice Sanitation (1)
Identify foodborne illness, how to prevent it, and how to train employees in food sanitation procedures. Legal issues pertaining to the Indiana health codes will be emphasized. Become eligible to take the National Restaurant Association manager’s sanitation certification examination (Servsafe).

HOSP 210 - Customer Service (3)
Concentrates on building quality service skills and knowledge needed to foster excellent customer relations.

HOSP 220 - Meal Design and Presentation (3)
Fundamentals of planning, preparing, and serving nutritionally adequate, appetizing, and aesthetically appealing meals with emphasis on resource management. Attention given to foods and types of table service suitable for various occasions and the use of computers in foodservice.
Prerequisite: HOSP 110.

HOSP 222 - Advanced Culinary Techniques (3)
Fundamentals of planning, preparing, and serving financially responsible, appetizing and aesthetically appealing meals in a commercial kitchen environment. Attention is given to foods and learning the fundamentals of using commercial food preparation equipment and the use of computers in food service.
Prerequisite: HOSP 110.
Not open to students who have credit in HOSP 220.
Open only to hospitality and food management majors and food management minors.

HOSP 250 - Lodging Management (3)
Examines the departmental structure of hotel operations along with the duties, responsibilities, and challenges of hospitality management within the hotel industry.
Open only to hospitality and food management majors, hospitality management minors, and Geography concentration 2: travel and tourism.

HOSP 262 - Facilities Planning, Layout and Design (3)
Fundamentals of planning, layout, purchasing, and use of equipment and space for all aspects of the hospitality industry including food service operations.

HOSP 300 - Cost Control in Hospitality and Food Industry (3)
Controlling costs from a management perspective in the hospitality and foodservice industry.
Prerequisite or parallel: ACC 201.
HOSP 369 - Internship in Food or Hospitality Management (3)
Provides the opportunity for the student to work in an established internship setting to gain professional experience in one’s specific area of study.
Prerequisite: HOSP 147 and HOSP 210 and HOSP 250 and HOSP 376 or HOSP 400; documented experience of at least 300 hours in a food, event/meeting, or hotel establishment, and an additional 100 hours of customer service either directly or indirectly related to the hospitality industry. Hours must have been accumulated within prior 4 years. Documented attendance of internship meeting prior to registering for the course, and permission of HFM internship director or department chairperson.
Open only to hospitality and food management majors.

HOSP 376 - Introduction to Event Management (3)
An introduction to the management of special events including conventions, professional, and social meetings. Emphasis on fiscal responsibilities, logistics, and space allocation.
Open only to hospitality and food management majors, hospitality management minors; geography concentration 2: travel and tourism; journalism; advertising concentration: event planning and management, public relations concentration: event planning and management.

HOSP 395 - Food and Culture (3)
Explores the relationships between agricultural practices, diet patterns, food procurement and distribution, and religious dietary doctrines from a national and global perspective. Emphasis on how culture, national and international policies, and belief systems shape food consumption patterns.

HOSP 400 - Restaurant Management and Quantity Food Production (4)
Principles and processes of quantity food production and commercial kitchen equipment use are utilized. Focus on mastering skills related to quantity food production, distribution, storage, and service. Fiscal fundamentals related to restaurant operations are taught. Theory application is demonstrated through student-run operations of the Allegre Restaurant.
Prerequisite: HOSP 147 and HOSP 220 or HOSP 222.

HOSP 450 - Strategic Operation in Lodging Industry (3)
Examines current practices and business strategies implemented by lodging companies along with contemporary issues in the lodging industry.
Prerequisite: HOSP 250.

HOSP 475 - Catering for Profit (3)
Fundamentals of planning, organizing, preparing, and serving profitable and unique catering functions. Emphasizes menu development, customer service, marketing, and food production.
Prerequisite: HOSP 147 and HOSP 220 or HOSP 222.

HOSP 477 - Advanced Event Management (3)
Exploration of principles of management relating to special events, meetings, exhibits, catered functions and their intra-industry interaction.
Prerequisite: HOSP 376.

HOSP 496 - Seminar in Foods and Nutrition (1 TO 6)
Presentations and discussions on specific topics of current interest in foods and nutrition.
Prerequisite: permission of the department chairperson.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

HSC - HEALTH SCIENCE

HSC 160 - Fundamentals of Human Health (3)
Emphasizes life-style behaviors contributing to health promotion and disease prevention. General areas affecting health status are identified and suggestions made as to how health-related behaviors, self-care, and individual decisions contribute to wellness and influence dimensions of health. No regularly scheduled laboratory.

HSC 180 - Principles of Community Health (3)
Provides an introduction to community health concepts by examining the purpose, history, organization, functions, tools, activities, philosophy, and achievements of community health practice at the local, state, national, and international levels. Focuses on populations, settings, and special issues of community health. Includes an out of class service learning component.

HSC 200 - Introduction to Health Education and Promotion (3)
Basic philosophy and practice in health education emphasizing work settings and health educator roles. Early exposure to the literature and organizations that support health education. Lab experience working with a practitioner. Students are required to complete 20 shadowing/professional development hours.
Open only to health education and promotion majors and public health minors.
HSC 210 - Health Behavior Theories (3)
Provides students with an overview of how the social and behavioral sciences contribute to primary prevention in the rapidly expanding field of health behavior. Emphasis will be placed on theory-driven approaches that are supported by empirical investigations. Students will acquire a working knowledge of foundational theories used in public health practice as well as the ability to measure key theoretical constructs.
Prerequisite: HSC 180 and HSC 200, or permission of the department chairperson.

HSC 220 - Population, Race, and Culture in Health Promotion (3)
Explores the aspects of race and culture that influence health, public health policy, and the management and practice of healthcare. Among the aspects of U.S. culture that will be discussed are: race, ethnicity, gender, social class, and nationality. These cultural factors immediately impact patient-provider interaction, health and illness behavior, health care provider decision-making and ultimately impact health status. This knowledge will enhance students’ ability to serve as educated citizen advocates for improving health of disadvantaged groups.
Prerequisite: HSC 180 and HSC 200, or permission of the department chairperson.

HSC 250 - Emergency Health Care (3)
Prevention and emergency procedures of various emergency health problems and injuries, including cardiac and respiratory arrest. First Aid and CPR certifications are offered.
Not open to students who have credit in KINE 240 or PEP 250.

HSC 261 - Health, Sexuality, and Family Life (3)
Health aspects of human sexuality and family life with a focus on human reproduction, physiology of sexual response, sexual disorders and dysfunctions, sexually transmitted diseases, promotion of sexual health, and the family's role in sex education.

HSC 279 - Peer Health Education (1)
This is a one-credit course designed to train students as Peer Health Educators (PHEs). Students present health promotion programs to campus groups such as residence halls, student organizations, academic classes, fraternities, and sororities. PHEs also man awareness events, complete assignments and self evaluations of their performance, and attend special events as representatives of Health Education.
May not be repeated.

HSC 290 - Evaluation and Assessment in Health and Physical Education (3)
Designed as an introduction to evaluation and assessment strategies in health and physical education. Students will be introduced to content standards, assessment and evaluation, learn how to use standards as a guide for assessment, construction of assessment instruments including rubrics for assessing student work, and use of assessment results.
Prerequisite: PEP 161 and HSC 160 and decision point 1 complete.
Open only to health and physical education teacher education majors.

HSC 295 - Reading, Technology, and Instructional Strategies in School Health (3)
Designed to prepare students to exercise best practice literacy, technology, and instructional strategies within the health classroom. Students will learn to design and deliver standards-based health instruction while effectively integrating reading and technology. Emphasis will be on creating a literacy-rich classroom environment, improving communication with learners and their parents through the use of technology, and creating an engaging learning environment.
Prerequisite: HSC 160 and HSC 290; or permission of the department chairperson; meet decision point 2 requirements.
Open only to health and physical education teaching majors.

HSC 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

HSC 300 - Health Promotion Programming (5)
Explores the major components of planning, implementing, and evaluation of health promotion programs.
Prerequisite: HSC 180, HSC 200.
Open only to health science majors and minors.

HSC 301 - Program Planning in Health Promotion 1 (3)
Explores the major components of health promotion program planning, conducting needs assessments, and developing appropriate interventions.
Prerequisite: HSC 210 and HSC 220.
Open only to health education and promotion majors and community health education minors.
**HSC 302 - Program Planning in Health Promotion 2** (3)
Explores the major components of health promotion program implementation and evaluation. Students will have the opportunity to design and conduct program evaluation.
Prerequisite: HSC 301.

**HSC 310 - Healthcare Systems** (3)
Provides students with an overview of the U.S. healthcare system, its components and the policy challenges created by its organization. Describes the structure and function of the various private and public health care entities within the U.S. Strengths and weaknesses related to cost, quality and access are also analyzed. Basic economic theories that drive financing will also be considered.
Prerequisite: HSC 180 and HSC 200; junior status.

**HSC 344 - Disease Management in Health Promotion** (3)
Explores current information about infectious and non-infectious diseases from a non-clinical perspective to support the needs of health education programs in a variety of settings.
Prerequisite: HSC 160 and HSC 210 and PHYS 205.

**HSC 350 - Elementary School Health Program** (3)
School's role in promoting health and preventing disease among preschool and elementary school children. Focus on school health program (instruction, services, and environment), community resources, and health problems common to school children. No regularly scheduled laboratory.
Prerequisite: sophomore standing.

**HSC 363 - Current Issues in Administration and Coordination of Health and Physical Education** (3)
Addresses new and emerging issues in education, school health and physical education. Specific processes and issues associated with best practices in needs assessment, planning, implementing, evaluating school-based programs; coordination of school health/PE policies and programs in accordance with national and state guidelines; and controversial issues associated with health and wellness will be addressed.
Prerequisite: HSC 290 and HSC 295 or permission of the department chairperson; meet decision point 2 requirements.
Open only to health and physical education teacher education majors.

**HSC 365 - Health and Aging** (3)
Dynamics of later life and the aging process with specific emphasis on health. The physiological and behavioral dimensions of the aging process will be analyzed and discussed.

**HSC 367 - Drug Dependency and Abuse** (3)
Analyzes the medical, psychological, sociological, and legal dimensions of drug use in the United States. Examines the incidence and prevalence of drug abuse together with the roles played by the school and community in dealing with this health problem.

**HSC 368 - Consumer Health Issues** (3)
Health services and consumer protection organizations. Analysis of fraudulent health practices and nostrums, available health care systems, and health products.

**HSC 371 - Death and Dying** (3)
Analyzes the relationship between death and health with emphasis on the physiological, medical, psychological, legal, and consumer aspects of dying in contemporary America. Investigates problems that relate to the meaning of death, care of the dying, death ritual, bereavement, and death education.

**HSC 372 - Women and Health** (3)
General overview of issues related to women and health: health needs of working women, special nutritional concerns, the gynecological exam, reproductive anatomy and physiology, fertility and infertility, breast problems, wife abuse, and rape.

**HSC 381 - Stress Management** (3)
Aids in understanding the physiological, psychological, and sociological aspects of stress. Students will increase their awareness of the effects of stress, identify personal stress triggers, and develop strategies to minimizing stress throughout their daily lives.

**HSC 387 - Quantitative Methods and Epidemiology in Health Promotion** (3)
Introduction to the basic concepts, methods, and tools of public health data collection, use and analysis, practical applications of quantitative methods in health science. Weekly two-hour laboratory period emphasizes data management and analysis using advanced technology.
Prerequisite: MATH 108 or MATH 111 or MATH 112 or MATH 125 or MATH 132 or MATH 161 or MATH 162 or MATH 165 or MATH 166.
Open only to juniors and above.
HSC 388 - Organization and Administration in Health Promotion (3)
Helps students understand the organization and administration of community health agencies, including public health agencies and voluntary health agencies at the national, state, and local levels. Effective advocacy strategies, the importance of cultural competence, building and sustaining successful coalitions, and group facilitation techniques are addressed. The preparation of community health grant proposals and competencies of health education professionals are also addressed. Prerequisite: HSC 301.

HSC 389 - Insects and Your Health (3)
A survey of the diseases caused or transmitted by insects and other arthropods. Emphasizes the recognition of medically important arthropods and their biology and control. A weekly 3-hour laboratory provides an opportunity to collect and study live and preserved arthropod specimens.

HSC 390 - Honors Colloquium in Health Science (1 TO 4)
Exploration of selected current issues in health science with an emphasis upon individualized study, reporting, and discussion. Restricted to honors students. A total of 4 credits may be earned.

HSC 395 - Methods, Materials, and Curriculum for Teaching Health Education (3)
Application of the roles of the health teacher in a school setting. Functions considered include curriculum development including planning for instruction, instructional strategies, assessment; strategies for engaging diverse learners; and acting as a resource person for school health. Prerequisite: HSC 290, HSC 295, and HSC 363; or permission of the department chairperson; completion of decision point 2. Open only to health and physical education teacher education majors.

HSC 396 - Health Communication Media Production (2)
Designed to introduce graphic design and presentation methods with direct application to various health education settings. Students will complete several creative projects using relevant electronic technology and materials. Prerequisite: HSC 300 and HSC 494 or permission of the department chairperson.

HSC 398 - Workshop in Health Science (1 TO 6)
Critical contemporary issues in health science. May include consultants, guest lecturers, field trips, and group activities. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

HSC 462 - Health Promotion in the Worksite (3)
Explores the major components of planning, implementing, and evaluating of health promotion programs. Prerequisite: EXSC 301 or HSC 300 or permission of the instructor.

HSC 464 - Health Education in the Clinical Setting (3)
Theories of client education and application of the education process to individuals and groups in health-care settings. Emphasis on the multidisciplinary team concept in planning, implementing, and evaluating client education. Application of knowledge of growth and development in meeting learning needs of clients. Prerequisite: HSC 300 or permission of the instructor.

HSC 479 - Internship (6)
Serves as the culminating experiential opportunity enabling students to demonstrate their ability to perform the UCC Tier 3 cognitive skills from “experience to information to action.” Consists of a paid or unpaid internship experience in an approved environmental, public, community, clinical, worksite, or other health science program setting working a minimum of 360 hours. Integrates specified academic elements in addition to on-site work objectives. The internship provides students with experience in a minimum of four of the seven responsibility areas as outlined in the Responsibilities and Competencies for Entry-Level Health Education Specialists (NCHEC). Prerequisite: admission to internship program.

HSC 482 - Environmental Health (3)
Examines health issues, scientific understanding of causes, and possible future approaches to control of the major environmental health problems in industrialized and developing countries. The relationship of people to their environment, how it affects their physical well-being, and what they can do to influence the quality of the environment and to enhance the protection of their health are also emphasized. Basic concepts of the modes of transmission of environmental stressors from source or reservoir to host and methods of reducing their impact on human population are accentuated. Prerequisite: HSC 180.
HSC 487 - Applied Research, Writing, and Evaluation in Health Promotion (3)
Provides an introduction to general principles and basic techniques of research methods appropriate to the investigation of problems in community health. Students will evaluate the writing and statistical analyses of existing research articles. Students will also produce a research proposal and provide a scientifically rigorous paper that includes introduction, methodology, and results/evaluation sections.
Prerequisite: HSC 387; senior status.

HSC 494 - Health Communication (3)
Contemporary health communication issues, including communication strategies, models, and theories, to enhance delivery of health education programs in various settings. Central focus on application of social marketing principles and planning models. Micro-level (interpersonal interactions with other people) and macro-level (organizational and mass media) applications emphasized.
Prerequisite: HSC 220 and HSC 301.

HSC 495 - Professional Preparation in Health Promotion (3)
Provides information and resources to help students prepare for internships and careers in community health education, including student strategies to achieve a passing score on the Certified Health Education Specialist (CHES) examination.
Prerequisite: HSC 302.

HSC 498 - Special Studies in Health Science (1 TO 6)
Designed to give undergraduate health science students who exhibit special aptitude and interest an opportunity to pursue special lines of scientific investigation on an individual basis. Experimental work, wide reading, and development of research techniques or skills.
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

IDES - INTERIOR DESIGN
IDES 100 - Introduction to Interior Design (2)
Introduces the interior design profession to students. Discusses the curriculum, career options, licensing, accreditation, design process, associations and knowledge and skills required from an entry level interior designer. Designed for students already in the program and students who may want to explore this field and is presented as a comprehensive overview that may be helpful in future interior design studies or in the selection of a major.

IDES 101 - Rapid Visualization (3)
An introduction to the techniques of freehand drawing and technical sketching to develop confidence in design visualization. Students will learn a systematic approach to drawing imaginary 3-D objects, concepts, and metaphors.
Open only to interior design majors and minors.

IDES 110 - Design Fundamentals (3)
Basic elements of design and composition, their theories and application in interior design. Understanding the fundamentals of design through two- and three-dimensional design projects and through creative problem solving.
Open only to interior design majors and minors.

IDES 111 - Graphic Communication 1 (3)
Various graphic communication techniques used as tools of interior design. Emphasis will be on sketching, perspective drawing, paraline drafting, color rendering, and 3-D model making.
Prerequisite: IDES 100 and IDES 101.

IDES 112 - Design Presentation Techniques (3)
An introduction to the use of two-dimensional, three-dimensional, and four-dimensional (digital) presentation design techniques. Students will learn the integrated use of traditional and digital media tools to articulate their concept development, design process, and design decision into informative and visual documents, and professional layouts.
Prerequisite: IDES 101.
Open only to interior design majors and minors.

IDES 114 - Sustainable Interiors (3)
Focused on the examination and application of the appropriate sustainable/green principles in interior design. Emphasis will be on Leadership in Energy & Environmental Design for Contract Interiors Green Building Rating Systems™ (LEED-CI), a national certification program by the U.S. Green Building Council.

IDES 115 - Interior Materials and Applications (3)
Study of interior materials, finishes, furniture, and architectural components. Covers floor, wall, and ceiling finishes, furniture, cabinetry, and case goods. Selection criteria, green design, cost, quality, application, sources, and specifications will be discussed and analyzed.
Open only to interior design majors and minors.
IDES 120 - Graphic Communication 2 (3)
Visual communication techniques for interior designers. Emphasis on computer applications and basic training for Computer Aided Drafting (CAD).

IDES 210 - Historical and Theoretical Studies 1 (3)
Chronological survey of the development of major historical periods and accompanying theoretical precedents that shape the design of the built environment from antiquity through the mid-18th century. This interactive course encourages students to articulate theories based upon historical precedents providing a catalyst for future design solutions.
Prerequisite: IDES 110.
Open only to interior design majors and minors.

IDES 221 - Graphic Communication 3 (3)
An introduction to computer-aided 3-D modeling using a variety of current software. In addition, other computer-aided visual communication techniques will be introduced as tools in the design/problem-solving process.
Prerequisite: IDES 120 or permission of the department chairperson.
Open only to interior design majors and minors.

IDES 222 - Interior Design Studio 1 (3)
Introduction to design process and interior planning for small scale interior spaces with more emphasis on residential design.
Prerequisite: IDES 110, IDES 111, IDES 115.
Open only to interior design majors and minors.

IDES 224 - Interior Design Studio 2 (3)
Design and space planning for small to medium scale interior spaces integrating aesthetic, social, technical, and graphic communication. Introduction to research and programming processes.
Prerequisite: IDES 120, IDES 222.
Open only to interior design majors and minors.

IDES 225 - Historical and Theoretical Studies 2 (3)
Chronological survey of the development of major historical periods and accompanying theoretical precedents that shape design of the built environment from mid-18th century to the present. This interactive course encourages students to articulate theories based upon historical precedents providing a catalyst for future design solutions.
Prerequisite: IDES 210.
Open only to interior design majors and minors.

IDES 228 - Graphic Communication 4 (3)
An advanced 3-D modeling course using current modeling and rendering software to produce high quality perspectives and animations.
Prerequisite: IDES 120 or permission of the department chairperson.

IDES 261 - Universal Design (3)
Addresses the established principles of universal design by examining the benefits for people with differing abilities. The history of universal design is addressed, which is a design method providing accessibility to all people (diverse cultures, special populations, disabled, aging, and able bodied).
Prerequisite: IDES 120.

IDES 299 - Special Topics in Interior Design (1 TO 6)
This course will be used for offering topics of faculty interest and field study. A total of 6 credits may be earned.

IDES 300 - Interior Design Professional Practice (3)
Legal, financial, management, marketing, and administrative issues facing interior designers, firm principals, and managers. Covers business plan, potential legal problems, contracts, agreements, pricing products and setting fees, marketing and promotion of design services.
Prerequisite: junior standing or permission of the department chairperson.
Open only to Interior Design majors and minors.

IDES 310 - Construction Management for Interior Design (1)
Provides a necessary baseline knowledge vocabulary and understanding of the role and activities of the interior designers as it relates to architects, material suppliers, inspectors and constructors in the commercial building process. Discusses the skills generally required for sound project management typically associated with the interior design profession. The elements of a project and the role and responsibilities of the Project Manager are studied. Students are also acquainted with site supervision, financial, labor, safety, equipment, contracting issues, typical construction delivery systems, the planning and contracting, estimating methodology, contract forms and provisions related to liability for interior design and construction companies. International Building Code and the importance of contract language negotiations are discussed.
Prerequisite: IDES 324.
Open only to Interior Design majors and minors.
IDES 314 - Color and Light in Interior Design (3)
Exploration of the principles that govern the use of color and light in interior design. Application of these principles in residential and commercial settings.
Prerequisite: IDES 224.

IDES 320 - Furniture Design (3)
This studio emphasizes the study of furniture design as art and science. Students will be introduced to historical styles and theoretical concepts, aesthetics and ergonomics, technology and design processes of furniture and furnishings, including the examination of differing forms, cultural references, anthropometrics, materials, and traditional to hybrid fabrication processes.
Prerequisite: IDES 221, IDES 224, or ARCH 201.
Open only to interior design majors and minors.

IDES 330 - Construction Documents for Interior Designers (2)
Designed to practice the fundamentals of construction documentation for interior designers. Students use a previously designed space to develop a comprehensive set of construction drawings and schedules which would enable an Owner or Contractor to provide a Rough Order of Magnitude cost for the project.
Prerequisite: IDES 324 and IDES 362.
Open only to Interior Design majors and minors.

IDES 334 - Interior Design Studio 4 (3)
Development and application of planning techniques of larger scale commercial projects with focus on hospitality and retail design.
Prerequisite: IDES 324.
Open only to interior design majors and minors.

IDES 362 - Interior Construction, Building Systems, and Regulations (3)
Covers information required for interior construction and building systems, environmental systems/controls, and regulations. Detailing of interior components, custom cabinetry, construction of partitions, ceiling, and flooring will be discussed. Further, principles of lighting, acoustic, thermal comfort, indoor air quality, structural systems, distribution systems (power, HVAC, mechanical, data, and plumbing) and regulations (codes, standards, and guidelines) will be covered.
Prerequisite: IDES 221 and IDES 224.

IDES 369 - Internship in Interior Design (3)
Provides the opportunity for the student to work in an established internship setting in interior design, architecture, or related design firms to gain professional experience in the field of environmental design.
Prerequisite: IDES 324 and permission of the internship coordinator.
A total of 6 credits may be earned.
Open only to Interior Design majors.

IDES 400 - NCIDQ Preparation (1)
Prepares students for the National Council for the Interior Design Qualification exam by simulating the actual testing experience. Covers all the exercises that will be encountered on the actual examination.
Prerequisite: IDES 424 or permission of the department chairperson.
Open only to interior design majors.

IDES 420 - Interior Design Programming (3)
Methods for gathering, organizing, and assessing data needed to design the interior of any type of building. Design concepts, goals, needs, facts, client values, staff and employee projections, current and future space requirements, adjacencies, furnishing, furniture and equipment requirements, project cost, schedule, and building codes will be discussed.
Prerequisite: IDES 324.

IDES 424 - Interior Design Studio 5 (3)
Development and application of planning techniques, construction documentation techniques of larger scale commercial projects with focus on health care and office systems environments.
Prerequisite: IDES 334.

IDES 484 - Interior Design Studio 6 (3)
Comprehensive studio integrating research and analysis of existing or proposed structures, contextual development of interior solutions, building constraints, and specialized products and materials specifications. A self-directed studio with research completed in fall semester in the programming course.
Prerequisite: IDES 420, IDES 424.
Open only to interior design majors and minors.

IDES 490 - Independent Study in Interior Design (1 TO 3)
Independent study in Interior Design with guidance by faculty member. Written proposal must be approved by program director prior to term of study.
A total of 6 credits may be earned.
ID - INTERDEPARTMENTAL

ID 101 - Freshman Seminar (1 TO 2)
Through individual assessment, readings on issues in education, and academic portfolios, skills necessary for freshman-year success are learned.
Prerequisite: permission of the freshman academic advisor.
A total of 2 credits may be earned.

ID 151 - Final Cut Pro, Level 1 Certification (1 TO 3)
An introduction to video editing techniques and workflows in Final Cut Pro. Topics include basic setup, customization, importing assets, editing and trimming techniques and tools, audio editing and audio creation, finishing and final output. This course prepares students to become an Apple Certified Pro in Final Cut Pro, Level 1.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 152 - Sound Editing in Final Cut Studio, Level 1 Certification (1 TO 3)
An introduction to sound editing in Final Cut Studio's Final Cut Pro and Soundtrack Pro. Topics include editing audio files, performing multitrack mixing, synchronizing audio and video, and fixing common audio problems. Prepares students to become an Apple Certified Pro in Sound Editing in Final Cut Studio.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 153 - Color Correction in Final Cut Studio, Level 1 Certification (1 TO 3)
An introduction to color correcting in Final Cut Studio's Final Cut Pro and Color. Topics include basics of color balancing and correction, secondary grading, creating color effects and looks, and skin tone adjustments. Prepares students to become an Apple Certified Pro in Color Correction in Final Cut Studio.
Offered credit/no credit only.
Prerequisite: ID 151.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 154 - Motion, Level 1 Certification (1 TO 3)
An introduction to motion graphics design in Motion. Topics include behavior-based animation, parameter behaviors, particle system design, title animation, using Motion templates, keying techniques, masking methods, advanced 3D features, keyframing, and Final Cut Studio integration. Prepares students to become an Apple Certified Pro in Motion.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 155 - DVD Studio Pro, Level 1 Certification (1 TO 3)
An introduction to DVD authoring in DVD Studio Pro. Topics include storyboarding; preparing assets with Compressor; designing motion menus; creating buttons, interactive links, slideshows and playlists; adding alternate audio streams and camera angles; burning; and replication. Prepares students to become an Apple Certified Pro in DVD Studio Pro.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 160 - Photoshop Certification (1 TO 3)
An introduction to the many digital imagery tools and workflows in Photoshop. Topics include retouching digital photos, working with layers and masks, navigating the workspace, preparing images for print and Web, and working with 3D object. Prepares students to become an Adobe Certified Associate in Photoshop.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 161 - Dreamweaver Certification (1 TO 3)
An introduction to designing and publishing Web sites with Dreamweaver. Topics include creating and managing Web sites, building rich interactive interfaces, and incorporating graphics, text, and video. Prepares students to become an Adobe Certified Associate in Dreamweaver.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 162 - Flash Certification (1 TO 3)
An introduction to creating animations and interactive multimedia projects with Flash. Topics include keyframing animation, importing video and sound files, and integrating interactive buttons using ActionScript. Prepares students to become an Adobe Certified Associate in Flash.
COURSES

Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 163 - After Effects Certification (1 TO 3)
An introduction to motion graphics design and compositing with After Effects. Topics include animating graphics and text, keying techniques, masking methods, color correction, using advanced 3D features, and rendering and outputting. The first step in preparation to become an Adobe Certified Expert in After Effects.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 164 - Illustrator Certification (1 TO 3)
An introduction to designing graphics with Illustrator. Topics include creating and editing shapes, combining objects, working with brushes, adding effects, working with symbols, and outputting images for multiple formats. The first step in preparation to become an Adobe Certified Expert in Illustrator.
Offered credit/no credit only.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

ID 165 - Premiere Pro (1)
An introduction to real-time, timeline based video editing software with Adobe Premiere. Topics include importing and managing tapeless media, creating transitions, producing titles, adding video effects, mixing sound, compositing the footage, adjusting color, and exporting. This course is in preparation to become an Adobe Certified Associate in Premiere Pro.
Offered credit/no credit only.

ID 166 - InDesign (1)
An introduction to creating documents with Adobe InDesign. Topics include creating documents for print, online, or mobile devices, import and edit text, styles, graphics, tables, interactivity through animation, video, or sound. The first step in preparation to become an Adobe Certified Expert in InDesign.
Offered credit/no credit only.

ID 167 - Fireworks (1)
An introduction for creating and integrating highly optimized graphics with Adobe Fireworks. Topics include working with images and layers, working with text, optimizing for the Web, creating simple graphical buttons, rollover effects, pop-up menus, and improving workflow along with collaborating with other Adobe Creative Suite applications.
Offered credit/no credit only.

ID 168 - Lightroom (1)
An introduction for creating the best of digital photography with Adobe Lightroom. Topics include importing, organizing and selecting images, developing and editing, creating slideshows, printing, publishing, and exporting your photos.
Offered credit/no credit only.

ID 169 - Soundbooth (1)
An introduction for sound editing with Adobe Soundbooth. Topics include creating audio, basic edits including trimming, panning, and fading clips along with removing unwanted noise, exploring effects, mixing and editing multitrack projects.
Offered credit/no credit only.

ID 170 - Aperture (1)
An introduction to photo enhancement and management. Topics include managing and adding metadata, organizing photos, creating advanced slideshows that include HC videos, titles, and layered soundtracks, indexing photos with Faces and Places, and creating workflows for photo shoot production.
Offered credit/no credit only.

ID 171 - Encore DVD (1)
An introduction to creating DVDs. Topics include creating DVDs with advanced features such as interactive menus, multiple audio tracks, and subtitle tracks as well as learning about a slideshow editor, updated user interface, automated chapter menus, and flowchart.
Offered credit/no credit only.

ID 172 - Logic Pro (1)
Made for musicians who want to write, record, edit, and mix audio. Topics include recording and editing MIDI data, working with audio effects, understanding workflow techniques, mixing and automation, manipulating pitch and time, and using software instruments.
Offered credit/no credit only.

ID 173 - Maya (1)
An introduction to 3D animation. Topics include learning the core concepts of CG and working in 3D, modeling, texturing, lighting, animation, and rendering.
Offered credit no/credit only.
**ID 181 - Pro Tools 101 (1)**
Covers basic Pro Tools principles. Topics include recording live instruments, MIDI sequencing of software synthesizers, audio editing, and region looping. Students will complete a project from set up to mixdown. This is the first step in preparation to become a certified Pro Tools Operator.
Offered credit/no credit only.

**ID 182 - Pro Tools 110 (1)**
Provides a more detailed look at the Pro Tools system reinforcing knowledge learned in Pro Tools 101. It covers all the key concepts and skills needed to operate a Pro Tools LE system. This is the second step in preparation to become a certified Pro Tools Operator.
Offered credit/no credit only.
Prerequisite: ID 181.

**ID 251 - Final Cut Pro, Level 2 Certification (1 TO 3)**
An in-depth look at advanced editing and finishing techniques in Final Cut Pro. Topics include creating transitions, fixing screen direction errors, editing multicamera projects, managing media, and working with film. Prepares students to become an Apple Certified Pro in Final Cut Pro, Level 2.
Offered credit/no credit only.
Prerequisite: ID 151; student must be Final Cut Pro, Level 1 Apple Certified Pro.
A total of 6 credits may be earned in all digital corps, but no more than 3 in any one semester or term.
Open only to undergraduates.

**ID 282 - Pro Tools 201 (1)**
Covers the core concepts and skills needed to operate a Pro Tools/HD system in a professional studio environment. Continues to build on the fundamental concepts covered in previous courses. This is the third step in preparation to become a certified Pro Tools Operator.
Offered credit/no credit only.
Prerequisite: ID 182.

**ID 283 - Pro Tools 210 Production (1)**
Covers techniques for working with Pro Tools in a professional post production environment. Concepts and skills learned in Pro Tools 101, 110, and 201 are reinforced with practical post-specific examples. This is the final step in preparation to become a certified Pro Tools Operator, Post.
Offered credit/no credit only.
Prerequisite: ID 282.

**ID 284 - Pro Tools 210 Music (1)**
Covers techniques for working with Pro Tools systems in a professional music production environment. Concepts and skills learned in Pro Tools 101, 110, and 201 are reinforced with practical music-specific examples. This is the final step in preparation to become a certified Pro Tools Operator, Music.
Offered credit/no credit only.
Prerequisite: ID 283.

**ID 300 - Related Field Experiences (1 TO 12)**
Available for advanced standing credit only and not through registration. Departments may use this course to grant students university credit on programs under their jurisdiction for field experience meeting departmental crediting criteria. Students must apply formally to the department chairperson for such credit and supply supporting documentation. The department determines the amount of credit to be granted and notifies the registrar. The Office of Academic Advising is informed of how the credit is to be applied to students' programs.
A total of 12 credits may be earned.

**ID 301 - Introduction to Peace Studies and Conflict Resolution (3)**
Interdisciplinary study of methods of achieving peace within communities and among nations; history of peace movements and the causes of conflict; and analysis of principles to resolve conflict using case studies.

**ID 369 - New York Arts Program (3 TO 16)**
New York Arts Program is a credit bearing off-campus program for students who have demonstrated ability in the arts, communication, or creative industries and wish to pursue their education while exploring professional career options. The program is an immersive semester designed to advance students’ creative and critical skills.
A total of 16 credits may be earned.

**ID 399 - Independent Study in Peace Studies and Conflict Resolution (1 TO 3)**
Topics for independent study and research to be chosen and investigated in consultation with instructors with special competence in the topic involved. The credit hours may be accumulated in more than one semester.
Prerequisite: ID 301; permission of the instructor or the department chairperson.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.
Open only to minors in peace studies and conflict resolution.
ID 400 - Immersive Learning Experiences (1 TO 15)
Designed specifically for approved immersive learning experiences involving teams of students and faculty collaborating on interdisciplinary projects.
Prerequisite: permission.
A total of 15 credits may be earned.

ID 401 - Internship in Peace Studies and Conflict Resolution (1 TO 6)
Supervised participation in a mentorship relationship in which students gain work-related experience and apply acquired knowledge of peace studies and conflict resolution. Involves participation in an organization, agency, or business.
Prerequisite: ID 301; permission of the instructor or department chairperson.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.
Open only to minors in peace studies and conflict resolution.

ID 495 - Tier 3 Experience for Bachelor of General Studies Students (1)
A Tier 3 experience for students who are completing the Bachelor's of General Studies degree. Students will work independently with a faculty member to design a course based in one or two of the student's minor areas of concentration. Each course will be individually designed to meet that student's needs, and will allow the student to demonstrate the movement in cognitive skills from experience or information to action. Each student will also demonstrate their ability to write at the college level, and will submit a reflective essay discussing his or her experiences.
Prerequisite: permission of the dean of University College.
Open only to BGS students.

IEI - INTENSE.ENG.INSTITUT
IEI 100 - IEI Level Fundamentals (9)
A compilation of IEI fundamentals level courses: IEI 101 Writing, IEI 102 Grammar, IEI 103 Reading, IEI 104 Speaking, IEI 105 Listening, and IEI 106 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

IEI 101 - Writing Fundamentals (1.5 TO 99)
Focuses on the development of basic writing skills. Students will identify parts of the sentence, apply basic rules for writing, write sentences in different tenses, and practice the writing process, especially proofreading.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 102 - Grammar Fundamentals (1.5 TO 99)
Provides the foundations of language structure for the students. Key concepts that need to be communicated are parts of speech and basic word order.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 103 - Reading Fundamentals (1.5 TO 99)
Assists students in gaining and practicing recognition skills such as skimming and scanning for pre-level one reading development. It gives opportunities for developing reading comprehension and also provides the students with practice in the skills of responding appropriately to demonstrate comprehension of reading material.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 104 - Oral Communication Fundamentals (1.5 TO 99)
Students will learn how to respond appropriately to basic verbal classroom directions, make polite requests to an instructor, request information from others, introduce themselves and others verbally, and retell information from verbal introductions of others. They will also gain practice in reporting on important and frequently-discussed topics.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 105 - Extensive Reading and Keyboarding 1 Fundamentals (1.5 TO 99)
Focuses on increasing reading fluency and students' typing speed. Depending on the abilities of the students, the course can work on reading for enjoyment as well as comprehension and overall understanding, with the aid of an abridged reader.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 106 - Vocabulary and Literacy Fundamentals (1.5 TO 99)
Focuses on vocabulary acquisition, including the pronunciation and spelling of the words. Students are also introduced to the vowel sounds of English, and must learn to recognize them orally and in writing.
Offered credit/no credit only.
A total of 99 credits may be earned.
IEI 110 - IEI Level 1 (9)
A compilation of IEI level 1 courses: IEI 111 Writing, IEI 112 Grammar, IEI 113 Reading, IEI 114 Speaking, IEI 115 Listening, and IEI 116 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

IEI 111 - Writing Level 1 (1.5 TO 99)
Focuses on advancing students' ability to express their thoughts and inquiries in written form by using an added tense and learning about sentence variety. Students will also develop the ability to appropriately use basic electronic written communication in the target language. Finally, students will begin pre-development of research skills by being encouraged through writing exercises to ask questions of interest and to label sources of information.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 112 - Grammar Level 1 (1.5 TO 99)
Students continue to master simple verb tenses, basic parts of speech, and simple sentences. They are introduced to compound and complex sentences. Students also continue to learn how to ask and respond to questions appropriately. In addition, students are introduced to the different meanings of phrasal verbs, definite and indefinite nouns as well as adjective forms.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 113 - Reading Level 1 (1.5 TO 99)
Designed to help students develop reading and vocabulary skills. The topics in this course are real-world topics related to culture, science, social studies, and so forth. Students will improve their reading comprehension, acquire dictionary skills to build vocabulary, and develop visual literacy.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 114 - Oral Communication Level 1 (1.5 TO 99)
Designed to enhance students' speaking skills along with the other language skills. Among other things, students will be able to introduce themselves and others, respond appropriately to common classroom directives, and report (orally or in writing) events using more than 10 sentences.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 115 - Extensive Reading and Keyboarding 2 Level 1 (1.5 TO 99)
Designed to enhance students' reading fluency and typing speed. Two readers will introduce students to cultural concepts.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 116 - Vocabulary and Literacy Level 1 (1.5 TO 99)
Focuses on vocabulary acquisition, including the pronunciation and spelling of the words on the Level 1 word list. Students continue to learn the IPA, increasing their knowledge of simple vowels and adding diphthongs and consonants.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 120 - IEI Level 2 (9)
A compilation of IEI level 2 courses: IEI 121 Writing, IEI 122 Grammar, IEI 123 Reading, IEI 124 Speaking, IEI 125 Listening, and IEI 126 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

IEI 121 - Writing Level 2 (1.5 TO 99)
Teaches students to identify and write the following types of paragraphs: definition, description, process-analysis and opinion. Each of the writings should include all of the elements of a paragraph (i.e. topic sentence, supporting sentences and concluding sentence). They should also demonstrate correct spelling, accurate grammar, and a variety of sentence structures.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 122 - Grammar Level 2 (1.5 TO 99)
Introduces more complex concepts of English grammar, such as modals. Students begin to analyze their grammar choices instead of simply applying the appropriate rule.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 123 - Reading Level 2 (1.5 TO 99)
Focuses on increasing students' overall reading proficiency through reading practice of an authentic text. Students will also develop basic reading strategies such as using context and inflections in order to increase overall comprehension of a text and build on prior knowledge of a topic when reading.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 124 - Oral Communication Level 2 (1.5 TO 99)
Through open-ended, in-class group discussion and a variety of activities, students learn about general cultural behaviors, beliefs, and expectations in the U.S. The focus for this course is to guide students in becoming yet more familiar with and comfortable in a new culture and to aid them in becoming integral participants.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 125 - Extensive Listening 1 Level 2 (1.5 TO 99)
Students will improve both their discrete and global listening skills in this course. Students will watch American sitcoms and should understand the main idea/dilemma, produce a paragraph describing characters, and analyze politeness, formality, and gestures in the episodes.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 126 - Vocabulary and Literacy Level 2 (1.5 TO 99)
Using a graded reader, students will identify the main idea in a reading, use context to identify unknown vocabulary, and identify specific figures of speech, such as metaphors, similes, and personification. They should also be able to generate and answer questions about a text and summarize accurately.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 130 - IEI Level 3 (9)
A compilation of IEI level 3 courses: IEI 131 Writing, IEI 132 Grammar, IEI 133 Reading, IEI 134 Speaking, IEI 135 Listening, and IEI 136 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

IEI 131 - Writing Level 3 (1.5 TO 99)
Level 3 Writing is the introduction to the academic essay. Students learn the basic features of an essay and write two essay types: compare/contrast and a summary/response essay. They also are introduced to topics such as incorporating citations, summarizing, and paraphrasing. Students are expected to acquire more than a basic understanding of intellectual property as they learn these skills.
Offered credit/no credit only.

IEI 132 - Grammar Level 3 (1.5 TO 99)
Students develop mastery in the interpretation and production of the tense-aspect system of English, paying particular attention to present perfect, present perfect progressive, and past perfect.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 133 - Reading Level 3 (1.5 TO 99)
Students in Level 3 engage in reading an authentic academic text as they use prior knowledge and comprehension strategies to understand the meaning. They also develop research skills by locating materials through CardCat.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 134 - Oral Communication Level 3 (1.5 TO 99)
Communicative speaking/listening course that focuses on higher-level usage of conversational skills such as interviewing and formal group discussions. Pragmatic issues such as politeness, especially in agreement and disagreement, are key outcomes of the course. This course reinforces many skills including grammar, logical structures from writing, and vocabulary.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 135 - Extensive Listening 2 Level 3 (1.5 TO 99)
Students will improve both their discrete and global listening skills in this course. Thus, the approach should be two-pronged, using both the text Sound Advice (which is very much oriented towards distinguishing sound changes in spoken American English) and using authentic listening clips from news reports.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 136 - Vocabulary and Literacy Level 3 (1.5 TO 99)
The key goals of this course are to broaden and deepen learners’ working vocabulary (Level 3 word list) and develop reading fluency.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 140 - IEI Level 4 (9)
A compilation of IEI level 4 courses: IEI 141 Writing, IEI 142 Grammar, IEI 143 Reading, IEI 144 Speaking, IEI 145 Listening, and IEI 146 Vocabulary and Literary. A full-
time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

IEI 141 - Writing Level 4 (1.5 TO 99)
Provides students with the strategies and skills needed to write and edit a two-page cause and effect essay and a three-page argumentative paper. Focusing on critical thinking as a foundation of the writing process, students will learn to accurately paraphrase, summarize, and synthesize peer-reviewed articles and cite sources using APA style.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 142 - Grammar Level 4 (1.5 TO 99)
Focuses on grammatical features including the perfect and perfect progressive aspects, passive voice, relative clauses, and degree complements. Students continue to build on previous knowledge from earlier levels and work toward a better understanding in order to use the previous grammar rules in a meaningful way.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 143 - Reading Level 4 (1.5 TO 99)
Focuses on guiding learners through the process of using authentic academic textbooks and databases. Students learn to locate argumentative texts for future research projects; acquire the skills to evaluate the objectivity, credibility, and appropriateness of texts and cited sources; and develop reading strategies for understanding the structure and content of argumentative texts.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 144 - Speaking Level 4 (1.5 TO 99)
Students continue to learn and master the skills of participating in and leading academic classroom discussions in a culturally, pragmatically appropriate way. This is the last course to explicitly focus on these skills, so students should be confident in their discussion skills before completion of the course.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 145 - Listening Level 4 (1.5 TO 99)
Introduces students to academic lectures and teaches them the skills they need to comprehend their content. Students learn to use their notes to successfully answer both detail-level and "big-picture" comprehension questions about a lecture. They also learn strategies, such as interpreting non-verbal cues, which can aid in comprehension of a lecture.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 146 - Vocabulary and Literacy Level 4 (1.5 TO 99)
Focuses on improving reading fluency through reading a high-level abridged novel and mastering the Level 4 word list (part of the AWL). Students are expected to apply critical thinking skills to the texts.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 150 - IEI Level 5 (9)
A compilation of IEI level 5 courses: IEI 151 Writing, IEI 152 Grammar, IEI 153 Reading, IEI 154 Speaking, IEI 155 Listening, and IEI 156 Vocabulary and Literary. A full-time IEI student will take this grouping of courses to satisfy the level requirements.
Offered credit/no credit only.
Open only to full-time IEI students.

IEI 151 - Writing Level 5 (1.5 TO 99)
The primary goal is to teach students how to write a six-page argumentative research paper using a process approach that involves brainstorming, prewriting, database research, drafting, revising, and publication. Students also complete an annotated bibliography.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 152 - Grammar Level 5 (1.5 TO 99)
Students will build on their knowledge of previously learned structures and add more complex grammatical features such as sensory and causative verbs, modals of prediction and inference, and conditionals.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 153 - Reading Level 5 (1.5 TO 99)
Offers a rigorous continuation of Level 4 academic reading, emphasizing critical reflection. Students will guess the meaning of words in context, identify main ideas, and trace arguments. Students will also paraphrase, summarize, and interpret graphs/tables/charts to demonstrate comprehension.
Offered credit/no credit only.
A total of 99 credits may be earned.
IEI 154 - Speaking Level 5 (1.5 TO 99)
Students learn about delivery and presentation skills as well as focus on creating strong content. In addition to the presentation focus, there is a pronunciation goal of improving intonation.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 155 - Listening Level 5 (1.5 TO 99)
The purpose of this course is to continue preparing students to comprehend academic lectures. While the course reinforces overall listening skills developed in Level 4, it introduces students to the abstract thinking skills that they need to assess and support arguments presented in academic lectures. They will also be expected to understand a lecture after hearing it once.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 156 - Vocabulary and Literacy Level 5 (1.5 TO 99)
Focuses on improving reading fluency and comprehension through reading a popular novel and mastering the Level 5 word list (part of the AWL).
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 161 - Writing Level 6 (1.5 TO 99)
Students continue to learn and practice the various steps necessary to do effective research. The focus of this course is to write a well-supported and well-organized argumentative research paper of approximately 8-10 pages in length. Students will use library databases to search for sources, identify a research topic of their own, create an annotated bibliography, and write a literature review.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 162 - Grammar Level 6 (1.5 TO 99)
Focuses on more advanced grammar features including various finite and nonfinite clauses; complex sentences; the verb system--tense, aspect, and voice; and determiners. Students will work on meaning and production while continuing to build on previous knowledge from past grammar courses. Students should also focus on self-correction and using the grammar learned in this course in authentic and meaningful ways.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 163 - Reading Level 6 (1.5 TO 99)
Students practice critical reading with longer academic texts and apply reading strategies acquired in previous levels. They practice and develop advanced college reading skills (vocab in context, main ideas, inference, argument, etc.) and analyze texts to trace different types of arguments.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 164 - Speaking Level 6 (1.5 TO 99)
Focuses on both debate and pronunciation. The purpose of debate in this course is to help students develop critical argumentative and thinking skills. In addition to debate, students are encouraged to become aware of their own pronunciation difficulties and set their own goals for pronunciation improvement.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 165 - Listening Level 6 (1.5 TO 99)
The purpose of this course is to provide instruction in advanced listening comprehension. The ability to take efficient and accurate notes of an academic lecture and use those notes to answer comprehension questions is a fundamental course outcome.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 166 - Vocabulary and Literacy Level 6 (1.5 TO 99)
Focuses on improving reading fluency and comprehension through reading a BSU-selected freshman reader and mastering the Level 6 word list (part of the AWL).
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 171 - Writing for Graduate Students Level 6 (1.5 TO 99)
Students continue to learn and practice the various steps necessary to do effective research. The focus of this course is to write a well-supported and well-organized argumentative research paper of approximately 8-10 pages in length. Students will use library databases to search for sources, identify a research topic of their own, create an annotated bibliography, and write a literature review.
Offered credit/no credit only.
A total of 99 credits may be earned.

IEI 190 - Integrated Skills English (7.5)
Focuses on the development of basic English skills in preparation for academic English studies in the IEI.
Offered credit/no credit only.  
Open only to full-time IEI students.

**INAD - INTERN FASHION APPAREL**

**INAD 369 - Internship in Fashion Apparel Design (1 TO 6)**
Provides the opportunity for the student to work in an established internship setting to gain professional experience in one's specific area of study.  
Prerequisite: FASH 303; MKG 300; permission of the department chairperson.  
A total of 6 credits may be earned.

**INFM - INTERN FASHION MERCH**

**INFM 369 - Internship in Fashion Merchandising (3 TO 6)**
Provides the opportunity for the student to work in an established internship setting to gain professional experience in one's specific area of study.  
Prerequisite: FASH 270 and FASH 280 and FASH 345 and FASH 392; and MKG 300 or MGT 342; permission of the department chairperson.  
A total of 6 credits may be earned.

**INTB - INTL BUS ADMINISTRATION**

**INTB 265 - Introduction to International Business (3)**
Introduces the field of international business including coverage of the cultural, economic, political, and legal environments in which organizations function. Provides an overview of world markets emphasizing communications, trade, and legal matters in international relationships.

**INTB 300 - Foreign Field Study in Business (0 TO 15)**
Student participation in an approved foreign field study. Includes an investigation of business and economic conditions as well as other cultural factors such as history, geography, language, and society. Requires pre-departure assignments and culminating paper(s) upon return.  
Prerequisite: permission of the director of the international business minor.  
A total of 15 credits may be earned.

**INTB 369 - Internship in International Business (1 TO 6)**
Under a Miller College of Business approved and supervised program, international business majors work as interns for business firms, government agencies, or other types of organizations. Requires periodic reporting and/or other educational activities.  
Prerequisite: permission of the department chairperson or internship coordinator.  
A total of 6 credits may be earned.  
Open only to international business majors or minors.

**INTB 490 - Seminar in International Business Decisions (3)**
Case studies designed to stress the practical application of the management decision-making process for the purpose of professionally resolving international business problems. This seminar is designed to prepare students for careers in international business management.  
Prerequisite: FIN 352; MGT 301; MKG 470; or permission of the instructor.

**INTS - INTL STUDY ABROAD**

**INTS 300 - Study Abroad Immersive Projects (1 TO 15)**
Participation in immersive assignments/projects at an approved study abroad site. Assignments/projects will be designed and implemented so as to meet immersive education criteria as defined by Ball State.  
A total of 15 credits may be earned.

**IS - INTERNATIONAL STUDIES**

**IS 400 - Capstone in International Studies (1)**
Using a portfolio approach, students review their international studies course work to create a comprehensive reflection of how it all fits together.  
Prerequisite: minimum 12 credits of completed international studies electives.

**ISOM - INFO SYS & OPERT MGT**

**ISOM 112 - Computer Applications for Design Solutions (3)**
Focuses on using computer applications such as Adobe Acrobat, Illustrator, Photoshop, and InDesign for processing design solutions in business. The design process and these contemporary computer applications will be discussed and used to create products which are design solutions to business problems. To solve these business problems, cognitive skills associated with knowledge to judgement transformations will be utilized.

**ISOM 125 - Introduction to Business with Integrated Computer Applications (3)**
Offers an overview of the business environment with an emphasis on accounting, economics, finance, human resource management, information systems, management, marketing, logistics and supply chain management. Integrates the use of computer application software to
design, create, and produce deliverables for problem solving and decision making within the areas of business. Explores career opportunities within the areas of business.

**ISOM 210 - Business Information Systems (3)**
Reviews the imperative information services in modern organizations. Details the role of information technologies and computer systems used in the planning, management, and evaluation of these information services. Presents elements of managerial decision making and critical and creative thinking to improve business operations. Applies case studies for individuals and teams to solve business problems.
Prerequisite: C or better grade in ISOM 125.

**ISOM 249 - Foundations of Business Communication (3)**
Provides pre-business majors with a cornerstone course designed to develop the interpersonal, analytical, written, and presentation skills needed to succeed in upper division courses and on the job. ISOM 249 is to be taken prior to or concurrent with those courses that complete the admission requirement to the Miller College of Business.
Prerequisite: C or better grade in ISOM 125 and ENG 104.

**ISOM 251 - Introductory Operations Management (3)**
Introduction to the tools and techniques of management with practical applications to the production of goods and services.
Parallel: MGT 300 or permission of the department chairperson.
Not open to BS or BA candidates for a major in the Miller College of Business.

**ISOM 255 - Introduction to Business Information Technology (3)**
Introduction to business information technology concepts, including relationship to business process, organizational influences; needs of technology users, ergonomics and other human factors; supporting hardware and software.
Prerequisite: minimum grade of C in ISOM 125.

**ISOM 299X - Experimental/Developmental Topics (1 TO 6)**
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

**ISOM 300 - Project Management (3)**
Students learn the foundation of project management which includes key project management knowledge areas such as, project scope, time, cost, risk, human resources, procurement, and quality. Students are also introduced to project management software and the benefits of using software in typical planning and control activities. Emphasis is placed on stakeholder communication and leadership strategies as an essential component of project management success.
Prerequisite: junior standing, ISOM 210, or permission of the department chairperson.

**ISOM 340 - Multimedia and Web Publishing for Business (3)**
Organize, develop, and produce business information for distribution via print, Internet, and digital formats. Emphasis on developing and applying original multimedia elements, including sound, graphics, animation, and video. Hands-on use of state of the art Web publishing tools and techniques will be utilized for business applications.
Prerequisite: minimum grade of C in ISOM 125.

**ISOM 351 - Operations Management (3)**
Discusses decision making in the operations functions for the creation of goods and services and its relationship with other business functions. Topics include: operations strategy, emerging process technologies, planning and scheduling, inventory management, just-in-time systems, and quality management.
Prerequisite: ECON 221 or permission of the department chairperson.

**ISOM 365 - Business Information Technology Training and Development (3)**
Design, delivery, and evaluation of training for users of business information technology. Topics include: needs assessment, adult learning theory, instructional design, technology/media for training delivery systems implementation, evaluation, and follow up.
Prerequisite: CIS 226.

**ISOM 369 - Industry Internship (3 TO 6)**
Supervised employment for credit. Students are expected to plan, manage, or evaluate information services or logistics and supply chain management in an organization.
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

**ISOM 465 - Blended Learning (3)**
Introduces strategies that create a blended-learning model that includes integrated knowledge, e-learning, and electronic performance support. Traditional classroom instruction methods with technology-enhanced inquiry using event-based activities and Internet-based resources. And theory-practice perspective blending self-reflection,
connected learning, and interactive collaboration as an online learning community.
Prerequisite: ISOM 365.

**ISOM 497 - Independent Study (1 TO 6)**
Supervised study of some phase of information systems or logistics and supply chain management.
Prerequisite: senior standing; permission of the department chairperson.
A total of 9 credits may be earned among the 3 courses in ISOM 369, ISOM 497, and ISOM 498.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

**ISOM 498 - Seminar in Information Systems or Logistics and Supply Chain Management (1 TO 3)**
Explores current problems, theory, research, and trends in information systems or logistics and supply chain management.
Prerequisite: senior standing; permission of the department chairperson.
A total of 9 credits may be earned among the 3 courses in ISOM 369, ISOM 497, and ISOM 498.
A total of 9 credits may be earned, but no more than 3 in any one semester or term.

**ITAL - ITALIAN**

**ITAL 101 - Beginning Italian 1 (4)**
The first course in the Italian language.

**ITAL 102 - Beginning Italian 2 (4)**
Prerequisite: ITAL 101 or its equivalent.

**JAPA - JAPANESE**

**JAPA 101 - Beginning Japanese 1 (4)**
The first course in beginning Japanese language.

**JAPA 102 - Beginning Japanese 2 (4)**
The second course in beginning Japanese language.
Prerequisite: JAPA 101.

**JAPA 201 - Intermediate Japanese 1 (4)**
Designed for students with credit in JAPA 101 and JAPA 102. Further develops skills in listening, speaking, reading, and writing Japanese, and increases knowledge of Japanese culture.
Prerequisite: JAPA 102 or its equivalent.

**JAPA 205 - Japanese Popular Culture (3)**
Examines contemporary Japanese popular culture with topics including: anime, comics, games (ACG), J-POP, fashion, idols and fan communities from historical and theoretical perspectives. Taught in English.

**JAPA 250 - Japanese Anime (3)**
In recent years, Japanese animation has become incredibly popular both in Japan and around the world. This online course is to accommodate the broad interest in Japanese animation and channel enthusiasm into systematic engagement with this unique and fascinating genre that connects and crosses Japanese culture, history, literature, society, popular culture, and technology. Taught in English.

**JAPA 301 - Advanced Japanese 1 (4)**
Designed for students with credit in JAPA 202. Further skill development in the idiomatic use of the Japanese language and increased understanding of Japanese culture.
Prerequisite: JAPA 202 or its equivalent.

**JAPA 302 - Advanced Japanese 2 (4)**
Designed for students with credit in JAPA 301. Enhances skills in fluent idiomatic use of the Japanese language, understanding of Japanese culture. Includes an introduction to some of the masterpieces of Japanese literature in translation.
Prerequisite: JAPA 301 or its equivalent.

**JAPA 303 - Readings in Japanese (3)**
Designed to build vocabulary, reading skills, and recognition of kanji using progressively more difficult authentic materials: signs, schedules, menus, bulletins, information sheets, and selections from newspapers, journals, and contemporary literature.
Prerequisite: JAPA 202 or its equivalent, or permission of the instructor.

**JAPA 304 - Composition (3)**
Designed to develop practice in writing simple everyday communications such as correspondence, forms, reports, and short compositions. Stress on developing grammar skills, use of kanji, and use of set conventional forms.
Prerequisite: JAPA 202 or its equivalent, or permission of the instructor.

**JAPA 334 - Japanese Culture and Civilization (3)**
Survey of the origins and development of Japanese culture: art, literature, religion, philosophy, political and social institutions from earliest to modern times. An overview of
cultural traditions for those with a general interest in Japan. Taught primarily in English. Prerequisite: JAPA 202 or its equivalent, or permission of the instructor.

**JAPA 337 - Japanese Linguistics (3)**
Introduction to Japanese linguistics, particularly phonological and syntactical structures and communication patterns. Readings and discussions include an examination of the similarities and differences between Japanese and English. Prerequisite: JAPA 202 or permission of the instructor.

**JAPA 338 - Business Japanese (3)**
Designed to make advanced Japanese students familiar with commercial forms and terminology used in business, banking, and industry as well as Japanese corporate culture. Prerequisite: JAPA 202 or the equivalent, or permission of the department chairperson.

**JAPA 400 - Japanese Study Abroad (3 TO 9)**
Study of intermediate or advanced Japanese language, literature, and culture in a foreign country where Japanese is the native language. May include seminars arranged during travel. Prerequisite: permission of the department chairperson. A total of 9 credits may be earned.

**JAPA 401 - Contemporary Masterpieces (3)**
Reading and discussion of selected modern Japanese literary texts concentrating on selections from poetry, short stories, essays, and novels such as "Snow Country" by Kawabata and "Golden Temple" by Mishima. Readings in English translation and Japanese. Prerequisite: JAPA 202 or its equivalent, or permission of the instructor. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**JAPA 402 - Classical Masterpieces (3)**
Introduction to classical Japanese texts of literary and historical significance. Includes "The Tale of Genji," "Tale of the Heike," and selections from other major works of fiction, poetry, essay, and drama. Readings are in English translation and Japanese. Prerequisite: JAPA 202 or its equivalent, or permission of the instructor. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**JAPA 403 - Advanced Reading and Writing (3)**
Designed to develop practice in reading and writing at a level high enough to function in business and industry. Stress on developing vocabulary, Kanji characters, and conventional forms. Prerequisite: JAPA 303, JAPA 304; permission of the department chairperson.

**JAPA 404 - Seminar in Language (3)**
Designed to develop communication skills at a level high enough to function in academic, business, and industry. Stress on developing advanced grammar, speaking and listening skills, and communicational strategies in various contexts. Prerequisite: JAPA 301 or its equivalent.

**JAPA 405 - Seminar in Japanese-English Translation (3)**
Training students in skills in translating Japanese into English, and vice versa, to prepare them for a career in which such skills are required, such as the business world or foreign relations. Prerequisite: JAPA 301 or its equivalent.

**JAPA 470 - Japanese Immersive Study Abroad (1 TO 3)**
Immersive capstone study of advanced Japanese language, literature, and culture in a foreign country where Japanese is the native language. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.

**JAPA 498 - Readings (1 TO 9)**
Individualized readings in English or Japanese on a Japanese topic selected with the advice and direction of the instructor. Prerequisite: permission of the instructor. A total of 9 credits may be earned.

**JOUR - JOURNALISM**

**JOUR 101 - Media and Society (3)**
Study of the structures and functions of media communications and how they inform, persuade, and entertain audiences. Overview of the evolving relationships among media industries and American society. Focus on advertising, public relations, and news organizations. Not open to students who have credit in TCOM 100 or TCOM 101.
JOUR 103 - Introduction to Media Design (3)
Introduces students to the history, theories and concepts behind visual communication and how media practitioners use design and visuals to communicate information and tell stories across platforms.
Parallel: JOUR 101.
Open only to students pursuing a program in the journalism department.

JOUR 104 - Strategic Writing (3)
Develops basic writing skills that public relations and advertising professionals use. Content focuses on journalism writing, including Associated Press style, proper grammar, syntax and usage, and aspects of advertising and business writing.
Prerequisite: JOUR 101 and successful completion of a departmental language usage proficiency exam.
Open only to journalism department majors, minors and those pursuing a major in business analytics.

JOUR 150 - Introduction to Basic Concepts of Journalism Education (3)
Designed to help students make balanced decisions about preparing for and functioning in teaching careers in the field of journalism/mass communications. Professionalism, job requirements, employment opportunities, secondary school curricula, and the role of secondary education within the entire educational process are discussed.
Prerequisite: JOUR 101 or permission of the department chairperson.

JOUR 169 - Professional Development Seminar (1)
Provides opportunities and skills needed to secure an internship/job in journalism, public relations, or advertising. Job-related issues, such as business etiquette, assertiveness, and sexual harassment are discussed.
Prerequisite: JOUR 101 or TCOM 101 or permission of the department chairperson.

JOUR 182 - Media Analytics and Content Strategy (3)
Explores best practices in social media and web analytics for journalism and strategic communications. Students will focus on content strategies to reach targeted audiences and increase audience engagement.

JOUR 206 - Introduction to Digital Media (3)
Introduces the digital media environment. Students emerge with an understanding of the seismic shift that digital media has brought to the communications field. At the end of the course, students will have a clear understanding of the importance of a personal brand and image in the digital world. This will include social media presence, digital portfolios and maintaining a digital lifestyle. Also introduces programming languages and how they are used in journalism, advertising and public relations.
Recommended parallel: JOUR 101.

JOUR 234 - Information Design I (3)
Survey of page design, type, and color theories, graphics reporting, Web design, and multimedia storytelling. Introduces the concepts of journalistic visual editing, journalistic graphics technology, and the history of visual journalism.
Prerequisite: JOUR 103.

JOUR 235 - Introduction to Photojournalism (3)
Photojournalism in a multimedia world including basic digital photography, portable lighting, news value, history, and industry standard ethical concepts. DSLR camera, lens, and portable flash required for this course.
Recommended parallel: JOUR 101.

JOUR 236 - Photojournalism Lighting (3)
Exploration of theories and practice of photojournalism lighting in and out of the studio. Focus is on assignment-based illustrative, conceptual, and architectural photography for publication and online distribution. DSLR camera, lens, and portable flash required for this course.
Prerequisite: JOUR 235.

JOUR 241 - Information Design II (3)
Explores more advanced areas of journalistic design and puts them into the context of working editorial and strategic communication environments. In addition to developing students’ design abilities, this course will also explore visual ethics, copyright, history and diversity in the form of editorial and strategic communication worlds.
Prerequisite: JOUR 234.

JOUR 242 - Programming for Interactive Media (3)
Introduces students to the role of programming and coding as it relates to multimedia storytelling and digital journalism. Students will explore how to mine and work with data sets, as well as explore programming languages most relevant to journalism, strategic marketing communications, and multimedia storytelling. Course projects will focus on the application of these programming languages through the lens of digital storytelling. Thus, students will learn to apply coding in the context of communications media.
Prerequisite: JOUR 206.
JOUR 250 - Introduction to Advertising (3)
A survey of the advertising communication process and its history. Focuses on communication research, creative strategy, campaign planning, function of mass media as carriers of advertising, and evaluation of advertising effectiveness.
Recommended parallel: JOUR 101 or TCOM 101.

JOUR 261 - Principles of Public Relations (3)
Survey of the theory, philosophy, and function of public relations practices and programs in organizations and institutions.
Recommended parallel: JOUR 101 or TCOM 101.

JOUR 265 - Public Relations Writing and Publicity Techniques (3)
Theory and practice of producing publicity tools for various media used in campaigns to promote and interpret personal, institutional, and organizational objectives and activities. Emphasizes writing and publicity problem solving.
Prerequisite: JOUR 261 and NEWS 105.
Open only to students pursuing a major in advertising or public relations.

JOUR 275 - Media Law and Ethics (3)
Examination of the ethical, legal, political, and social pressures on strategic communication. Explores ethical and legal implications in the workplace, with attention given to the historical development of laws and ethics in communication.
Prerequisite: JOUR 250 or JOUR 261.
Open only to majors in advertising, business analytics, and public relations.

JOUR 280 - Writing for Magazines (3)
Feature writing that specifically targets print and online magazines. Topics include market research, in-class editing, and critiques and analyses of award-winning articles. Students research, write and rewrite editorial packages including articles, sidebars and queries.
Prerequisite: JOUR 104 or NEWS 120.

JOUR 282 - Media Analytics Metrics (3)
Explores best practices in media analytics measurement for journalism and strategic communications. Students focus on analyzing audience engagement with media content to enhance content strategies of media companies.

JOUR 285 - Account Management (3)
Covers roles and functions of account management within a strategic communications environment. Includes account management concepts and terminology; covers leadership styles and behaviors; addresses basic business definitions and concepts as they apply to advertising and public relations; and introduces application of primary and secondary research to strategic communications campaigns.
Prerequisite: JOUR 250 or JOUR 261.

JOUR 299X - Experimental/Developmental Topics (1 TO 12)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 12 credits may be earned.

JOUR 302 - Diversity and Media (3)
Emphasizes the importance of a racial and cultural representativeness among media; examines media portrayals of racial and cultural diversity; examines the influence of mass media portrayals of racial and cultural diversity on individuals and society from social scientific and critical cultural perspectives; examines relevant contemporary issues related to racial and cultural diversity; and introduces inclusive media best practices.
Prerequisite: junior standing.

JOUR 311 - News Feature Writing (3)
An advanced writing course that requires in-depth reporting and information-gathering skills. Students will concentrate on learning to write informative, accurate news feature stories that provide detail and context for readers.
Prerequisite: NEWS 221.

JOUR 312 - Opinion Writing (3)
Researching and writing of columns, editorials, and reviews with emphasis on varied writing structures and styles.
Prerequisite: NEWS 221.

JOUR 320 - Information Design III (3)
Creative approaches to media design and presentation. Explores strategies for developing creativity and design problem solving, as well as visual literacy and visual/verbal interpretation. Emphasizes visual storytelling and conceptual approaches to design.
Prerequisite: JOUR 241.

JOUR 322 - Sportswriting and Reporting (3)
Introduction to sportswriting and reporting across media platforms with emphasis on skills needed to produce game and feature stories that provide detail and context.
Prerequisite: NEWS 105 or SPTA 345.
JOUR 323 - Media Design and Branding (3)
Designing for print, online and mobile media products. Incorporates project management skills, branding strategies and content development for creating and designing multiplatform products.
Prerequisite: JOUR 241.

JOUR 328 - Magazine Feature Writing (3)
Instruction and practice in techniques for interviewing, observation and research to write in-depth profiles, human interest features, and investigative essays. Students write long-form articles exploring complex issues for local, regional, or national publications.
Prerequisite: JOUR 280.

JOUR 332 - Photojournalism Managing and Editing (3)
Conceiving, proposing, assigning, and editing photographs in a multimedia environment. In-depth coverage of news, with application of industry standards and ethical concepts.
Prerequisite: JOUR 235.

JOUR 335 - Assignment Photojournalism (3)
In this intermediate course, student journalists will use photography to tell news, sports, and feature stories using traditional and emerging media technologies. Emphasis on news values, ethical practice, and historical context. DSLR camera, lens, and portable flash required for this course.
Prerequisite: JOUR 235.

JOUR 345 - Data Analysis and Visualization (3)
Examination of how stories and information are improved by placing data in a visual context. Focuses on researching and using data visualization tools to enhance storytelling and information delivery.
Prerequisite: JOUR 234.

JOUR 348 - Strategic Communications and Emerging Media (3)
Study of emerging media, with an emphasis on digital media, and the role emerging media plays in advertising and public relations. Explores emerging media’s role in society and on consumers and business, technology’s role in emerging media, and how emerging media impacts strategic communication development, implementation, and measurement.
Prerequisite: JOUR 250 or JOUR 261 or TCOM 345.

JOUR 352 - Media Planning 1 (3)
Strategy and procedures for planning, executing, and controlling the placement of advertising. Examines characteristics of media, techniques of media budgeting and selection, and methods of evaluating media effectiveness.
Prerequisite: JOUR 250 or TCOM 345.

JOUR 354 - Advertising Copy & Layout 1 (3)
Instruction in preparing copy for mass media advertising. Major emphasis on creative thinking and basic writing skills. Prepare copy strategies, write copy, prepare layouts and storyboards. Discussion of fundamentals of consumer motivation and selecting target audiences.
Prerequisite: JOUR 103 and JOUR 250 and NEWS 105 for advertising majors.

JOUR 368 - Strategic Communications Design (3)
Study of institutional and industrial publications as an important means of internal and external communications. Emphasizes design and production techniques.
Prerequisite: JOUR 103 and JOUR 250 and NEWS 105 for advertising majors or JOUR 103 and JOUR 261 and NEWS 105 for public relations majors.

JOUR 369 - Internship (0 TO 12)
Practical, supervised, on-the-job experience in a media-related industry or organizational setting.
Offered credit/no credit only.
Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned.

JOUR 380 - Long-form Digital Storytelling (3)
Examines the current state of digital publishing through reading and discussion, and then applies those concepts to create a long-form digital story delivered across multiple media. Students will explore this framework through long-form feature writing. While magazine articles incorporate the narrative and reporting elements of feature writing, they are distinguished by point of view, eloquence of style, and strength of argument. Students will create a culminating project that exists online, in print and on various eReader devices.
Prerequisite: JOUR 280.

JOUR 382 - Media Theory and Research (3)
Discussion of media theory and its role in strategic communications research. Emphasizes survey research, questionnaire construction, interviewing techniques, attitude measurement, copy testing, audience analysis, computer database searches, evaluation of externally supplied research, and data interpretation.
Prerequisite: BA 305 or JOUR 250 or JOUR 261 or TCOM 345.
Parallel: JOUR 101.
Open only to students pursuing a program in the journalism department.

**JOUR 385 - Advanced Writing and Design for Strategic Communications (3)**
Emphasizes the theory and practice of producing persuasive communications that promote and interpret client and organizational objectives. Focuses on developing strategies aligned with organizational objectives; researching, writing, editing, and designing communication tools in support of organizational objectives; and developing strategic implementation plans to maximize effectiveness of communication tools.
Prerequisite: JOUR 265 and JOUR 368 or JOUR 234 and JOUR 265.

**JOUR 390 - Honors Colloquium in Journalism (1 TO 3)**
Readings and in-depth exploration and discussion of pertinent issues, movements, and problems in journalism and mass communications research.
A total of 3 credits may be earned.
Open only to honors students and to students with areas in journalism by permission of the department chairperson.

**JOUR 395 - Journalism Teaching and Publication Advising Methods (3)**
Designed to study the structure of high school journalism and to aid the candidate in developing the necessary background/skills to teach high school journalism and advise student publications. Offers students the opportunity to explore teaching styles, student learning styles, lesson planning, staff publication management styles, student leadership strategies, and financial management of student publications.
Prerequisite: permission of the department chairperson.

**JOUR 397 - Immersion: Public Relations Project (3 TO 9)**
Participation in the public relations portion of a project-based immersive experience. Extensive writing and public relations strategy development is expected.
Prerequisite: permission of the journalism department chairperson.
A total of 9 credits may be earned.

**JOUR 405 - Strategic Communications Case Studies (3)**
Strategic planning principles for campaigns and program implementations, including use of communication, public opinion, change, and management theory; crisis planning and communication; issue management; integrated marketing communication; and case study reviews.
Prerequisite: JOUR 352 and JOUR 354 for advertising majors or JOUR 265 and JOUR 368 or JOUR 234 and JOUR 265 for public relations majors.

**JOUR 413 - Advanced Newswriting and Reporting (3)**
Advanced writing, reporting, and editing skills, including multiple-source interviewing, field observation, and use of databases. Emphasis on in-depth analysis and interpretation of a substantive area of coverage, including the use of community and public journalism theories and techniques.
Prerequisite: JOUR 311 or JOUR 312.

**JOUR 427 - Advanced Narrative Writing (3)**
Advanced narrative storytelling techniques with an emphasis on literary nonfiction, character development, and immersive reporting; study and discussion of best-known contemporary magazine writers and literary journalists from The New Yorker.
Prerequisite: JOUR 280 or instructor permission.

**JOUR 434 - Advanced Photojournalism Illustration (3)**
In-depth study and application of photo illustration. Includes history of photojournalistic illustration. DSLR camera, lenses, and portable flash required for this course.
Prerequisite: JOUR 236.

**JOUR 437 - Long-form Photojournalism (3)**
In-depth exploration of topics of community interest or significant social value. Finished work will be prepared for delivery over multiple platforms. DSLR camera, lens, and portable flash required for this course.
Prerequisite: JOUR 335.

**JOUR 452 - Media Planning 2 (3)**
Extended study in developing a comprehensive media plan. Emphasizes consumer research, media habits, creative selection of media vehicles, and use of the computer in planning and buying.
Prerequisite: JOUR 352.

**JOUR 453 - Integrated Campaigns Seminar (3)**
Examines case studies and contemporary issues involving advertising and integrated communications campaigns.
Prerequisite: JOUR 352 and JOUR 354 and JOUR 382. Open only to students pursuing a major in advertising.

**JOUR 454 - Advertising Copy & Layout 2 (3)**
Extended study in the conceptualization and creation of advertising emphasizing copy writing and layout for various media channels.
Prerequisite: JOUR 354.

**JOUR 455 - Immersion: Student Media Advertising (3 TO 9)**
Intensive student-driven advertising development experience working with various Unified Media Lab student media. Student teams function as an in-house Unified Media Lab agency providing advertising and promotional services and producing tangible, professional-quality advertising content. Prerequisite: permission of the department chairperson. Prerequisite recommended: JOUR 382, JOUR 385, and JOUR 456. A total of 9 credits may be earned. Open only to seniors.

**JOUR 456 - Advertising Campaigns (3)**
Synthesis of skills and concepts acquired in the specialized advertising courses. Research, plan, write, schedule, budget, and evaluate a complete advertising campaign. Enhances career development skills and portfolio-ready material. Prerequisite: JOUR 285, JOUR 352, JOUR 354 and JOUR 382.

**JOUR 460 - International Advertising and Public Relations (3)**
A survey of international advertising and public relations practices, both domestic and abroad. Introduces students to the ideas and theories of international advertising and public relations, with special emphasis on branding and strategic communication across multiple cultures. Prerequisite: JOUR 103, JOUR 104, and JOUR 250 for advertising majors or JOUR 103, JOUR 104, and JOUR 261 for public relations majors. Open only to students pursuing a major in advertising or public relations.

**JOUR 465 - Public Relations Campaigns (3)**
In this immersive team experience, public relations majors apply research and problem-solving techniques to actual public relations clients using all the methodologies learned previously. Emphasizes developing positive teamwork skills and portfolio and professional development including personal presentation skills. Prerequisite: JOUR 265 and JOUR 285 and JOUR 368 or JOUR 234 and JOUR 265 and JOUR 285.

**JOUR 474 - Producing Secondary Publications (3)**
Study of secondary student publication production, design, use, and conception. Explores journalistic purpose, visual literacy, visual/verbal interpretation, and design methods for newspapers, yearbooks, magazines, and online publications. Prerequisite: NEWS 221 or permission of the department chairperson.

**JOUR 479 - Unpaid Internship (0 TO 3)**
Practical, supervised, on-the-job experience in a media-related industry or organizational setting. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned. Offered credit/no credit only.

**JOUR 482 - Media Analytics in Practice (3)**
Immersive approach to gain cutting-edge knowledge of media analytics and turning them into action for a community partner. The Media Analytics in Practice project will offer hands-on learning experience while studying and practicing fundamentals of media analytics with professors, industry experts and our community partner.

**JOUR 485 - Strategic Communications Campaigns (3)**
In this immersive course, students apply problem-solving techniques to actual strategic communications campaigns and work for internal and external clients using methodologies learned previously in immediate-level courses. Emphasizes developing positive teamwork and leadership skills and includes opportunities to strengthen personal presentation proficiency. Prerequisite: JOUR 265 and JOUR 285 and JOUR 352 and JOUR 354 and JOUR 368 and JOUR 382 or JOUR 234 and JOUR 265 and JOUR 285 and JOUR 352 and JOUR 354 and JOUR 382.

**JOUR 495 - Individual Studies in Journalism (.5 TO 12)**
Students with areas in the Department of Journalism pursue a specific subject in-depth in consultation with a member of the faculty. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned.

**JOUR 496 - Creative Project: Graphics (1 TO 6)**
Execution of a creative project that has a significant visual communication purpose. Projects may take the form of an annual report or creative advertising campaign, for example, and must have print, online, and mobile components. The student must pitch his or her idea to one faculty member with sufficient design/graphics knowledge to advise his or her creative project. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.
KINE - KINESIOLOGY

KINE 164 - Life Skills for Student Athletes (3)
Introduces personal values and health concepts affecting both academic and athletic performance. Life skills such as values and value clarification, diversity, communication skills, decision making, time and stress management, alcohol and other drug/addiction education, sexuality issues, sport nutrition, and career development issues are addressed.

KINE 231 - Foundations of Coaching (3)
Engages all students to focus on the principles and philosophies of coaching team and individual sports. Content focuses on the application of these concepts in the development of a sound coaching philosophy. Based on the National Coaching Education Program Standards (NASPE-NCACE-ASEP).

KINE 240 - Athletic Safety and Injury Prevention (3)
Engages all students to focus on the prevention, identification, and basic rehabilitation of common athletic injuries and environmental illnesses. Students will learn how to implement and manage safety policies and procedures as well as when to refer to trained medical personnel to ensure the well-being of participants in athletic and fitness programs.

KINE 250 - First Aid (2)
First aid, CPR, and Bloodborne Pathogens Training and certification as outlined by nationally recognized agencies. Designed for majors or minors in the School of Kinesiology. Core Transfer Library: Health and Physical Education (IHP 1401)
Not open to students who have credit in HSC 250.

KINE 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

KINE 331 - Organization and Planning for Coaching Sports (3)
Based on three domains of the National Coaching Standards; covers procedures involved in the organization, training, and planning of team and individual sports at the scholastic level.
Prerequisite: KINE 231.

KINE 366 - Teaching and Coaching an Individual Sport (2)
Focuses on application of skills, tactics, and strategies of a specific individual sport (i.e., golf, track, swimming, diving).

KINE 368 - Teaching and Coaching a Team Sport (2)
Focuses on application of skills, tactics, and strategies of a specific team sport (i.e., basketball, volleyball, baseball, softball, football).

KINE 409 - Psychological/Social Issues in Sport (3)
Covers practical applications of the social and psychological issues which influence individual and/or team performance; content based on two domains of the National Coaching Standards and the NASPE/NASSM Standards for Sport Management Programs.
Prerequisite: permission of the coaching minor program coordinator.
Open only to sport administration majors and accepted coaching minors.

KINE 433 - Coaching Internship (3)
The student-coach will assist in coaching competitive sports. Supervised field-based experiences and in-depth daily and weekly reflection centering on self-awareness and the teaching-coaching process will occur during the course of the internship. The student-coach will become certified through a coaching association of their choice (with the approval of the Coaching Minor Program Coordinator) to prepare them for a future in the coaching profession.
Prerequisite: KINE 231 with a C or better, current CPR/first aid/AED certified; permission of the Coaching Minor Program Coordinator.
Open only to accepted coaching minor students.

KINE 499 - Independent Study in Kinesiology (1 TO 3)
An opportunity to investigate an area of particular interest to the student, under supervision of a faculty member. Extensive reading, research, analysis, and writing.
Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

LA - LANDSCAPE ARCHITECT

LA 100 - Introduction to Landscape Architecture (2)
An introduction to landscape architecture: lectures, site observations, and environmental experiences that focus on landscape architectural practice, representative projects, philosophy, and areas of specialization within the field.
LA 201 - Site Design (4)
Application of basic design principles, programming, and analysis to small-scale site-specific landscape design problems. Visual and functional design principles as they relate to natural and cultural influences in landscape design.
Open only to LA majors.

LA 202 - Park and Open Space Design (4)
Design projects emphasizing park design, park and recreational master planning, and open-space design in rural, suburban, or urban settings.
Prerequisite: LA 201.
Open only to LA majors.

LA 211 - Landscape Architectural Engineering 1 (4)
Principles and practices of landscape engineering. Emphasizes the techniques and applications of land surveying, earthwork techniques including grading and estimation, and principles of site drainage.
Prerequisite: LA 270.
Open only to LA majors and minors.

LA 214 - Field Studies (1)
On-site studies of landscape architectural projects and practices, natural areas, and historic sites and landscapes. Urban or rural field trips; may include visits to professional offices and public planning and design agencies. One three- to five-day field trip is required.
Parallel: LA 201.
Offered credit/no credit only.

LA 215 - Field Studies 2 (1 TO 3)
Group field studies of landscape architectural projects and practices, natural areas, and historic sites and landscapes. Urban and rural field trips may include visits to professional offices and public planning and design agencies. A minimum of one three- to five-day field trip is required.
Offered credit/no-credit only.
A total of 3 credits may be earned.

LA 220 - Landscape Architecture History - Ancient to Mid-19th Century (3)
The history of landscape architecture from ancient times to approximately the mid-19th century; course emphasizes the human environment relationship and contemporary parallels in landscape design.

LA 221 - Landscape Architecture History - Mid-19th Century to Recent Past (3)
The history of landscape architecture from the mid-19th century to the recent past. Emphasizes North American human-environment relationships, and their antecedents and cultural parallels in landscape design.

LA 270 - Environmental Systems (3)
Qualitative investigations and analysis of the interrelationships between people and landscape systems. Studies include the assessment of ecological systems including land, water, climate, and biotic systems; influence of natural processes as they relate to the principles of landscape architectural design, planning and construction.

LA 280 - Computer Applications in Landscape Architecture (3)
An introduction to the use of computers in landscape architecture. Emphasizes two- and three-dimensional computer-aided design and drawing, landscape data inventory and analysis, and landscape engineering.
Parallel: LA 201.
Open only to LA majors and minors.

LA 301 - Housing and Community Design (5)
Design projects focusing on social, political, economic, cultural, and environmental issues as they relate to land planning and site design for housing developments and residential communities.
Prerequisite: LA 202 and LA 280.
Open only to LA majors.

LA 302 - Planting Design (5)
Design problems focusing on the functional, ecological, and aesthetic uses of plants in the landscape.
Prerequisite: LA 211 and LA 341.
Open only to LA majors.

LA 310 - Landscape Architecture Design/Build Projects (3)
Experiential service learning design/build projects in landscape architecture. Faculty supervised, student implemented design and construction of site-scale spaces in support of community open space, recreation, or outdoor education needs.
Prerequisite: LA 270 or permission of the department chairperson.

LA 312 - Landscape Architectural Engineering 2 (4)
Principles and practices of landscape architecture engineering and construction emphasizing landscape
materials, structures, planting, and fabrication techniques. Includes design implementation techniques and construction documents.
Open only to LA majors and minors.

**LA 313 - Landscape Architectural Engineering 3 (4)**
Principles and practices of landscape engineering and construction. Emphasizes vehicular, bicycle and pedestrian circulation; roadway, trail and parking lot design and engineering; practices of storm water management; and advanced grading.
Prerequisite: LA 211.
Open only to landscape architecture majors.

**LA 320 - Therapeutic Landscapes (3)**
Principles and practices of planning and design of landscapes for healthy living. Topics may include the history and theory of therapeutic landscapes in support of health care services, active living issues in community design, and post-occupancy evaluations. Field trips may be required.
Prerequisite: LA 202 or LA 270; or permission of the instructor.

**LA 341 - Landscape Plants 1 (4)**
The study of woody and herbaceous plants, including plant identification and plant adaptation to urban and natural environmental conditions.

**LA 342 - Landscape Plants 2 (3)**
The study of herbaceous landscape plants including plant identification and landscape cultural requirements. Emphasizes both outdoor and indoor plants.

**LA 369 - Landscape Architecture Internship (0 TO 1)**
A minimum of ten weeks of supervised employment under the direction of a landscape architect or allied design professional. Departmental approval required in advance of qualified employment. Requires employer and self-evaluation reports. Requires two registrations: one zero-credit registration during semester of field experience and one one-credit registration the following fall semester.
Prerequisite: LA 302 and LA 312.
A total of 1 credit may be earned.
Open only to LA majors.
Offered credit/no credit only.

**LA 371 - Theories and Practices of Sustainable Site Design (3)**
Interdisciplinary course examining theories, tools, and practices of sustainable site design and landscape planning. Connections are made between theories and green design movements; sustainable design projects are examined. Emphasis is placed on the interdisciplinary nature of sustainable design, collaboration, and site design processes for complex systems.

**LA 380 - Computer Applications in Landscape Architecture 2 (3)**
Intermediate-level course in the use of computers in landscape architecture. Emphasizes Web design, motion graphics, video, CD authorship, various presentation techniques, three-dimensional computer modeling and animation, and landscape engineering.
Prerequisite: LA 280 or permission of the instructor.

**LA 401 - Regional Landscape Design (6)**
The application of principles of landscape architectural design to large-scale landscape settings. Topics include land planning, visual quality management, and natural and cultural landscape resource management.
Prerequisite: LA 301.
Open only to LA majors.

**LA 403 - Urban Design (6)**
Design studio emphasizing the physical and socio-behavioral influences on the design of cities. Projects may focus on the design of new urban environments or the redesign and revitalization of existing urban centers. May include interdisciplinary studies.
Prerequisite: LA 312 or LA 401 or permission of the instructor.
Open only to LA majors.

**LA 404 - Landscape Architecture Comprehensive Project (6)**
Analytical, conceptual, and design development processes applied to a comprehensive project in landscape architecture. Emphasizes guided independent design work based on individual initiative.
Prerequisite: LA 451.
Open only to LA majors.

**LA 406 - Interdisciplinary Design Studio (2 TO 5)**
An interdisciplinary studio focusing on topical studies in landscape architecture and related fields. Studio may be offered at on-campus or off-campus sites and may be part of an approved foreign study program.
Prerequisite: permission of the instructor and department chairperson.
A total of 5 credits may be earned.
Open only to juniors and seniors.
LA 414 - Landscape Architectural Engineering 4 (3)
Advanced methods of landscape architecture engineering and construction/implementation practices. Subjects include advanced applications for construction documentation, Building/Site/Land Information modeling (e.g., BIM); documented sustainable design criteria/guidelines/techniques (e.g., SITES); landscape construction management; and post construction evaluation. Course topics may include advanced sustainable site construction and landscape engineering applications for lighting, water, material selection, and landscape management.
Prerequisite: LA 313 or permission of the instructor. Open only to LA majors.

LA 420 - Historic Landscape Preservation (3)
Survey of the history, theory, and methodologies of historic landscape preservation. Includes topics in both vernacular and designed historic landscape preservation, primarily in North America.
Prerequisite: LA 221 or permission of the instructor.

LA 430 - Philosophy of Landscape Architecture (3)
Readings, seminars, and lectures in the background and development of historic and contemporary philosophies of landscape architecture. Includes discussions of design and environmental issues, land use, and professional ethics.
Prerequisite: LA 221 or permission of the instructor.

LA 451 - Landscape Architecture Research (3)
Methods, procedures, and case studies of landscape architectural research. Includes guided development of an individual research program and proposal leading to the landscape architecture comprehensive project (LA 404).

LA 460 - Professional Practice (3)
Methods and practices of the profession of landscape architecture. Subjects include business and governmental organization, elements of contract law, business management, marketing, professional licensure, and ethics.
Prerequisite: LA 302 or permission of the instructor.

LA 464 - Landscape Architectural Design Communications 2 (3)
Advanced methods of landscape architectural design communications using a variety of media.
Prerequisite: CAP 162.

LA 465 - Portfolio Preparation (2)
The preparation of resumes, portfolios, and brochures related to securing internship positions and other landscape architectural employment.

LA 471 - Sustainable Land Systems (3)
Interdisciplinary course addressing sustainability in relation to diverse resource issues. It explores regions and sites as parts of land systems; and landscape planning and design integration with these systems to promote sustainability. It focuses on resource harvesting and regeneration; environmentally responsible materials and technologies, sustainable planning and design, and building-site integration.

LA 480 - Computer Applications in Landscape Architecture 3 (3)
Advanced-level use of computers in landscape architecture. Emphasis on three-dimensional computer modeling, animation and simulation, fabrication, video, and presentation techniques.
Prerequisite: LA 380 or permission of the instructor.

LA 490 - Independent Projects (1 TO 3)
An independent study in environmental topics.
Prerequisite: approval of the program proposal by a faculty advisor, the professor responsible for study assessment, and the department chairperson.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

LA 498 - Special Projects in Landscape Architecture (1 TO 6)
Special and timely landscape architectural projects undertaken by groups.
A total of 9 credits may be earned, but no more than 6 in any one semester or term.

LAS - LATIN AMERICAN STDGS
LAS 101 - Introduction to Latin-American Studies (3)
Overview of the history, development and current trends of Latin-American countries from conquest through present times, focusing on economic, sociological, and cultural tendencies including the recent Latino migrations to the United States.

LAS 400 - Study Abroad (3 TO 9)
Study of intermediate or advanced Latin-American language(s), literature, and culture(s) in a foreign country where students are immersed within the Latin-American culture. May include seminars arranged during travel. May not be applied to foreign language majors or minors.
Prerequisite: permission of the instructor.
A total of 9 credits may be earned.
LAT - LATIN

LAT 101 - Beginning Latin 1 (3)
Introduction to Latin. Emphasizes pronunciation, elementary grammar, composition, and translation of simple Latin passages.

LAT 102 - Beginning Latin 2 (3)
Prerequisite: LAT 101 or its equivalent.

LAT 201 - Intermediate Latin 1 (3)
Intensive grammar review and readings from Latin prose and poetry.
Prerequisite: LAT 102 or its equivalent.

LAT 202 - Intermediate Latin 2 (3)
Prerequisite: LAT 201 or its equivalent.

LAT 301 - Introduction to Prose 1 (3)
Selections from Caesar, Cicero, Livy, and others.
Prerequisite: LAT 201 or the equivalent, or permission of the department chairperson.

LAT 302 - Introduction to Poetry 1 (3)
Selections from Ovid, Vergil, and others.
Prerequisite: LAT 201 or the equivalent, or permission of the department chairperson.

LAT 303 - Introduction to Prose 2 (3 TO 6)
Selections from Tacitus, Suetonius, Sallust, and others.
Prerequisite: LAT 201 or the equivalent, or permission of the department chairperson.
A total of 6 credits may be earned.

LAT 304 - Introduction to Poetry 2 (3)
Selections from Roman comedy, Horace, Catullus, and others.
Prerequisite: LAT 201 or the equivalent, or permission of the department chairperson.

LAT 305 - Prose Composition (3 TO 6)
Detailed grammar review, analysis of Latin prose style, and composition of extended passages in Latin.
Prerequisite: LAT 201 or the equivalent.
A total of 6 credits may be earned.

LAT 401 - History of Literature 1 (3)
Survey of Latin literature from the beginnings to the fall of the republic.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.

LAT 402 - History of Literature 2 (3)
Survey of Latin literature from Augustus to the end of the empire.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.

LAT 403 - Seminar in Latin Prose (3 TO 6)
Cicero.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.
A total of 6 credits may be earned.

LAT 404 - Seminar in Latin Poetry (3 TO 6)
Juvenal, Vergil, and Lucretius.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.
A total of 6 credits may be earned.

LAT 405 - Seminar in Latin Prose (3 TO 6)
Cicero.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.
A total of 6 credits may be earned.

LAT 406 - Seminar in Latin Poetry (3 TO 6)
Juvenal, Vergil, and Lucretius.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.
A total of 6 credits may be earned.

LAT 498 - Readings (1 TO 9)
Individualized readings or research to allow students to explore special topics with an individual instructor.
Prerequisite: three years of college Latin or the equivalent.
A total of 9 credits may be earned.

LSCM - LOGISTICS & SPLY CHAIN

LSCM 355 - Quality Management and Lean Six Sigma (3)
Focuses on concepts and tools for quality control and improvement in both manufacturing and service organizations. Topics include: total quality management, quality planning, quality cost principles, the use of statistical methods for quality control and improvement, Malcolm Baldrige National Quality Award criteria, and ISO standards.
Prerequisite: ECON 221.

LSCM 361 - Simulation, Modeling, and Optimization (3)
An applications-oriented course focused on computer modeling and simulation of issues in transportation and logistics planning using optimization tools. Modeling tools include: linear programming, integer programming, regression, heuristic methods, and other techniques.
Prerequisite: ECON 221 or equivalent or permission of the department chairperson.

LSCM 361 - Simulation, Modeling, and Optimization (3)
An applications-oriented course focused on computer modeling and simulation of issues in transportation and logistics planning using optimization tools. Modeling tools include: linear programming, integer programming, regression, heuristic methods, and other techniques.
Prerequisite: ECON 221 or equivalent or permission of the department chairperson.

LSCM 361 - Simulation, Modeling, and Optimization (3)
An applications-oriented course focused on computer modeling and simulation of issues in transportation and logistics planning using optimization tools. Modeling tools include: linear programming, integer programming, regression, heuristic methods, and other techniques.
Prerequisite: ECON 221 or equivalent or permission of the department chairperson.
LSCM 375 - Six Sigma Foundations (3)
Emphasis on Six Sigma topics such as quality engineering, inspection, auditing, and development of Lean Six Sigma foundational skills. Students learn to use analytical and statistical software to complete course assignments. Students are required to pass the American Society for Quality's (ASQ) Certified Quality Improvement Associate (CQIA) Exam.
Prerequisite: LSCM 355.

LSCM 452 - Inventory, Warehousing and Negotiations (3)
Focuses on inventory management, production planning, and scheduling activities in the entire supply chain in manufacturing and service organizations. Topics include forecasting, inventory management models, order quantities with level demand, lot sizing with time-varying demand, individual items with probabilistic demand, physical inventory and warehouse management, physical distribution, and negotiations.
Prerequisite: ISOM 351 or permission of the department chairperson.

LSCM 453 - Manufacturing Planning and Control (3)
Focuses on production and inventory management issues in the entire supply chain and the application of quantitative models and information systems and technologies. Topics include: demand management, sales and operations planning, master production scheduling, enterprise resource planning, material requirements planning, distribution requirements planning, capacity requirements planning, inventory management, and production activity control.
Prerequisite: ISOM 351 or permission of the department chairperson.

LSCM 454 - Supply Chain Management (3)
Examines the advancements of information technology/systems and material management tools in a global, supply chain environment. Students will develop an understanding of the overall supply chain management strategy including information systems and inventory strategies.
Prerequisite: ISOM 351 or permission of the department chairperson.

LSCM 459 - Current Topics in Operations Management (3)
Operations management topics of current concern to faculty and students. Potential topics are logistics management, Six Sigma, operations strategy, site and location analysis, management of service operations, ISO 9000/14000 quality management standards, etc.
Prerequisite: ISOM 351 or permission of the department chairperson.

LSCM 460 - Global Logistics and Transportation Management (3)
Focuses on the role of in-bound and out-bound logistics in global supply chains, customer relationship management, procurement, multi-modal transportation, pricing and economics, warehousing, packaging and materials handling, regulatory issues, and emerging technologies such as radio frequency identification, global positional systems, and geographically positioning systems.
Prerequisite: ISOM 351 or permission of the department chairperson.

LSCM 475 - Advanced Six Sigma (3)
Emphasis on advanced Six Sigma topics such as reliability engineering, project management, quality improvement, and leadership. Students are required to use advanced analytical and statistical software to complete course assignments as well as to complete and present a real-world Six Sigma project to a client company.
Prerequisite: LSCM 375.

LSCM 480 - Supply Chain Management Integration Project (3)
Senior level capstone course requires students to plan, develop, and present a capstone project in operations and supply chain management. Topics include global manufacturing strategies, green movement and reversed logistics, lean Six Sigma, enterprise resource planning and implementation, process design--value stream mapping, and product costing. In addition to class meeting time, students will be required to meet in arranged times to complete a capstone project.
Prerequisite: LSCM 361, LSCM 453, LSCM 460 or permission of the department chairperson.
Open only to logistics and supply chain management majors.

MATH - MATHEMATICS

MATH 108 - Intermediate Algebra (3)
Reviews number sense, fundamental concepts of algebra, including rules for expressions and equations, linear and quadratic equations, relations and functions, integer exponents, radicals, and systems of equations.
Prerequisite: two years of college preparatory mathematics in high school or equivalent.
Not open to students who have credit in MATH courses numbered higher than 108 except MATH 125.
Offered credit/no credit only.
MATH 111 - Pre-Calculus Algebra (3)
Reviews fundamental concepts of algebra; covers functions and their graphs, linear, power, quadratic, exponential, logarithmic, polynomial, and rational functions. Core Transfer Library: Mathematics (IMA 1601)
Prerequisite: MATH 108, appropriate score on the SAT/ACT, or appropriate scores on the mathematics placement test, or permission of the department chairperson.
Not open to students who have credit in MATH 132 or MATH 161 or MATH 165.

MATH 112 - Precalculus-Trigonometry (3)
Trigonometric functions, identities, and equations; graphs of the trigonometric and inverse trigonometric functions; solutions of right and general triangles; polar coordinates; and complex numbers. Core Transfer Library: Mathematics (IMA 1608)
Prerequisite: qualifying SAT/ACT score, or appropriate score on the mathematics placement test, or MATH 108 or MATH 111, or permission of the department chairperson.
Not open to students who have credit in MATH 132 or higher except by permission of the department chairperson.

MATH 125 - Quantitative Reasoning (3)
A diverse course including statistics and other topics such as mathematical modeling, problem solving, finance, geometrical concepts, growth patterns, and applications to the physical sciences, social sciences, and economics. Core Transfer Library: Mathematics (IMA 1607) Recommended background: three years of college preparatory mathematics in high school.

MATH 132 - Brief Calculus (3)
Brief survey of differential and integral calculus. Emphasizes business applications of these topics. Prerequisite: C- or better in MATH 111, or an appropriate score on the SAT/ACT or on the mathematics placement test, or permission of the department chairperson.

MATH 150 - Introduction to Teaching Mathematics in Secondary Schools (3)
An introduction to the process of becoming a Mathematics teacher in secondary schools. Through coursework and targeted clinical experiences, teacher candidates will begin to form their professional identities as future educators, develop a beginning knowledge base for teaching, and engage with the integration of technology throughout the learning process. They will also observe, develop, and demonstrate initial core teaching practices.
Prerequisite or parallel: MATH 165 or permission of the department chairperson.

MATH 161 - Applied Calculus 1 (3)
Discussion of limits, derivatives (including those of exponential, logarithmic, and trigonometric functions), differentials, and definite and indefinite integrals. Focuses on the application of these topics in the applied sciences. Core Transfer Library: Mathematics (IMA 1604)
Prerequisite: C- or better in MATH 111 and MATH 112, or an appropriate score on the SAT/ACT or mathematics placement test, or permission of the department chairperson.
Not open to students who have credit in MATH 165.

MATH 162 - Applied Calculus 2 (3)
Derivatives and integrals of transcendental functions with additional applications, techniques of integration, improper integrals, calculus in higher dimensions and series. Core Transfer Library: Mathematics (IMA 1605)
Prerequisite: C- or better in MATH 165, or C- or better in MATH 161, or permission of the department chairperson.
Not open to students who have credit in MATH 166.

MATH 165 - Calculus 1 (4)
Differential calculus of algebraic and transcendental functions and applications, antidifferentiation and the Riemann integral. Includes the use of graphing calculators and computer software. Core Transfer Library: Mathematics (IMA 1602)
Prerequisite: C- or better in MATH 111, MATH 112, or sufficient background in algebra and trigonometry as evidenced by the student’s SAT/ACT scores and/or score on the mathematics placement test, or permission of the department chairperson.

MATH 166 - Calculus 2 (4)
Standard techniques of integration, applications of the integral, numerical integration, sequences and series. Includes the use of graphing calculators and computer software. Core Transfer Library: Mathematics (IMA 1603)
Prerequisite: C- or better in MATH 165 or permission of the department chairperson.

MATH 181 - Elementary Probability and Statistics (3)
Algebra-based introduction to statistical applications through descriptive methods, probability, normal distributions, confidence intervals, hypotheses tests, regression, and correlation. Misuses of statistics and common probability misconceptions are discussed. Statistical experiments and simulations are conducted. Technology use is integrated throughout.
Prerequisite: MATH 108, or appropriate score on the SAT/ACT, or appropriate scores on the mathematics placement test, or permission of the department chairperson.

**MATH 201 - Number, Operations, and Algebraic Reasoning for the Elementary Teacher (4)**

In-depth treatment of concepts underlying common topics in the elementary mathematics curriculum including concepts in number, operations, and algebraic reasoning. Participants engage in purposeful activities that grow out of problem situations that require reasoning and creative thinking, gathering and applying information, discovering, inventing, communicating ideas, and testing those ideas through critical reflection and discussion.

Prerequisite: appropriate score on the SAT/ACT, or appropriate score on the mathematics placement test, or credit in MATH 108, or permission of the department chairperson.

Open only to concentration 1 mathematics teaching majors, or majors in elementary, special, or early childhood education.

**MATH 202 - Data Analysis, Geometry, and Measurement for the Elementary Teacher (3)**

In-depth treatment of concepts underlying common topics in the elementary mathematics curriculum including concepts in data analysis, geometry, and measurement. Use of selected concrete manipulatives and technology is included.

Prerequisite: MATH 201 with a C- or better grade.

**MATH 207 - Mathematics for the Teacher of the Exceptional Learner (4)**

Development of concepts in number and operation, algebra, geometry, measurement, data analysis, and probability needed by teachers of exceptional learners. Use of selected concrete manipulatives and technology is included.

Prerequisite: qualifying ACT or SAT score, or appropriate score on the mathematics placement test, or MATH 108, or permission of the department chairperson.

Not open to students who have credit in MATH 201 or MATH 202.

Open only to special education majors.

**MATH 215 - Discrete Systems (4)**

Topics from discrete mathematics, including formal logic, methods of proof, set theory, relations, recursion, combinatorics, and graph theory. A systematic development of number systems via equivalence classes is included as an application of these topics.

Prerequisite: C- or better in MATH 162 or MATH 165, or permission of the department chairperson.

**MATH 217 - Linear Algebra (4)**

Theory and application of systems of linear equations, vector equations, linear transformations, vector spaces, and inner product spaces. Includes the use of computer software.

Prerequisite: C- or better in MATH 162 or MATH 165, or permission of the department chairperson.

**MATH 221 - Probability and Statistics (3)**

Elementary probability theory, random variables, discrete and continuous probability distributions. Theory and applications of descriptive and inferential statistics. Statistical software and graphing calculator use is integrated throughout the course.

Prerequisite: C- or better in MATH 162 or MATH 165, or permission of the department chairperson.

**MATH 249 - Pre-College Mathematics from an Advanced Viewpoint 1 (3)**

In-depth treatment of concepts underlying common topics in the middle and high school mathematics curriculum. Topics include the development of number systems (including integers and decimal form of rational numbers), considering models of numbers, meanings and models of operations, justification of standard and non-standard algorithms, algebraic reasoning, proportional reasoning, and measurement and related geometric ideas.

Prerequisite: C- or better in MATH 166; C or better in MATH 150.

Open only to mathematics teaching majors.

**MATH 250 - Pre-College Mathematics from an Advanced Viewpoint 2 (3)**

In-depth treatment of concepts underlying common topics in the middle and high school mathematics curriculum. Topics include number systems, polynomial and transcendental functions, analytic geometry, and theory of equations.

Prerequisite: C- or better in MATH 166 and MATH 215; C or better in MATH 150.

**MATH 251 - Introduction to Mathematics of Finance (2)**

Mathematical topics in finance as expected to be useful in financial decision-making in the future. Topics will include compound and simple interest, savings, mortgages, loans, equity, annuities, equations of value, yield rates, amortization, sinking funds, bonds, and current topics in
finance as time permits. Emphasis will be on fundamental principles, calculations, and practical applications.

Prerequisite: C- or better in MATH 111 and MATH 112, or appropriate score on the SAT/ACT, or appropriate scores on the mathematics placement test, or permission of the department chairperson.

MATH 259 - Introduction to Actuarial Software (3)
Basic introduction to software currently used by actuarial science professionals. Includes a regularly scheduled computer laboratory.
Prerequisite: C- or better in MATH 111 and MATH 112, or appropriate score on the SAT/ACT, or appropriate scores on the mathematics placement test, or permission of the department chairperson.

MATH 267 - Calculus 3 (4)
Multidimensional calculus and its applications. Topics include three-dimensional vector calculus, Gauss's theorem, Green's theorem, and Stoke's theorem. Includes the use of graphing calculators and computer software.
Prerequisite: C- or better in MATH 166 or permission of the department chairperson.

MATH 271 - Mathematics Contest Problem Solving (1)
Advanced mathematics problem-solving strategies for individuals and groups. Designed to prepare participants for the Putnam Exam and other collegiate mathematics contests.
A total of 2 credits may be earned, but no more than 1 in any one semester or term.
Open to all students.

MATH 279X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

MATH 310 - Topics in Algebra for the Elementary and Middle School Teacher (3)
Development of algebraic concepts including variables, functions, and matrices, and applications of these topics in the elementary and middle school curriculum.
Prerequisite: MATH 202 with a C- or better grade.

MATH 311 - Algebraic Structures (3)
Consideration of the basic algebraic structures: groups, rings, integral domains, and fields. Examples of these structures and elementary proof will be emphasized as will polynomials over rings, integral domains, and the fields of real and complex numbers.
Prerequisite: C- or better in MATH 215 and MATH 217 or permission of the department chairperson.

MATH 316 - Topics in Number Theory for the Elementary and Middle School Teacher (3)
The study of a collection of topics from the theory of numbers that have specific applications in the elementary and middle school curriculum.
Prerequisite: MATH 202 with a C- or better grade.

MATH 320 - Probability (4)
Probability theory for discrete and continuous sample spaces, random variables, density functions, distribution functions, marginal and conditional distributions, mathematical expectation, moment-generating functions, common distributions, sampling distribution theory, central limit theorem, t, chi-square, and F distributions.
Prerequisite: C- or better in MATH 166 or permission of the department chairperson.

MATH 321 - Mathematical Statistics (4)
Random sampling, statistical inference, and sampling distributions, point and interval estimation, matching moments, maximum likelihood, mean square error, consistency, efficiency, uniformly minimum-variance unbiased estimator (UMVUE), Neyman-Pearson Lemma, Likelihood ratio tests, classical tests of significance, goodness-of-fit, contingency tables, correlation, regression, nonparametric methods, Bayesian methods.
Prerequisite: C- or better in MATH 320 or permission of the department chairperson.

MATH 330 - Technology in Elementary and Middle School Mathematics (3)
The use of technology in elementary and middle school mathematics, such as spreadsheets, calculators, algebraic or geometric modeling tools, educational software, and World Wide Web applications.
Prerequisite: MATH 202 with C- or better grade.

MATH 331 - Technology for Teaching, Learning, and Assessment in Mathematics (3)
The use of technology for teaching, learning, and assessment in mathematics. Includes the pedagogical use of a wide range of devices and tools that can be used to
help students make sense of mathematics, engage in mathematical reasoning, and communicate mathematically. Prerequisite: For teaching major in mathematics concentration 1 or concentration 2, MATH 250 with a grade of C- or better and permission to enroll in 300/400-level professional education courses; for elementary education area of concentration, MATH 202 with a grade of C- or better and permission to enroll in 300/400-level professional education courses.

**MATH 335 - Mathematical Models (3)**
Construction of mathematical models for use with problems in physics, chemistry, biology, and economics. Emphasizes the construction and interpretation of models. Existing computer software will be used. Prerequisite: C- or better in MATH 166 and MATH 217, or permission of the department chairperson.

**MATH 345 - Survey of Geometries (4)**
A comparative study of Euclidean and non-Euclidean geometries, their respective histories and technologies, and their applications in mathematics, the sciences, and modern life. Prerequisite: C- or better in MATH 166 and MATH 215 and MATH 217 or permission of the department chairperson.

**MATH 351 - Mathematics of Finance (3)**
Mathematical theory of compound interest, force of interest, determinants of interest rates, annuities, equations of value, yield rates, amortization, sinking funds, bonds, duration, convexity, immunization, cash flow matching and interest rate swaps. Prerequisite: C- or better in MATH 165 and MATH 251, or permission of the department chairperson. Prerequisite or parallel: MATH 166.

**MATH 354 - Exam Prep for Exam P/1 (3)**
Individualized study for the actuarial exams given by the Society of Actuaries and the Casualty Actuarial Society, Exam P/1. Prerequisite: C- or better in MATH 320 or permission of the department chairperson.

**MATH 355 - Exam Prep for Exam FM/2 (3)**
Individualized study for the actuarial exams given by the Society of Actuaries and the Casualty Actuarial Society, Exam FM/2. Prerequisite: C- or better in MATH 351 or permission of the department chairperson.

**MATH 360 - Topics in Geometry for the Elementary and Middle School Teacher (3)**
Investigation of selected topics in geometry and measurement, from both historical and contemporary perspectives, with applications in the elementary and middle school curriculum. Prerequisite: MATH 202 with a C- or better grade.

**MATH 363 - Numerical Analysis 2 (3)**
Topics include direct and iterative methods for solving systems of linear equations, eigenvalue problems; minimization of functions and linear programming. Includes programming of numerical algorithms. Prerequisite: C- or better in MATH 217 and MATH 462 or permission of the department chairperson.

**MATH 368 - Unpaid Professional Experience in Mathematical Sciences (1 TO 8)**
Supervised unpaid work and learning experience as a practicing mathematician, statistician, or actuarial scientist. Practical problem-solving experience will be gained through an internship, practicum, or other such situation. Prerequisite: permission of the department chairperson. Offered credit/no credit only. A total of 8 credits may be earned in MATH 368 and MATH 369 combined.

**MATH 369 - Paid Professional Experience in Mathematical Sciences (1 TO 8)**
Supervised paid work and learning experience as a practicing mathematician, statistician, or actuarial scientist. Practical problem-solving experience will be gained through an internship, practicum, or other such situation. Prerequisite: permission of the department chairperson. Offered credit/no credit only. A total of 8 credits may be earned in MATH 368 and MATH 369 combined.

**MATH 374 - Differential Equations (3)**
Introduction to nth-order ordinary differential equations, equations of order one, elementary applications, linear equations with constant coefficients, nonhomogeneous equations, undetermined coefficients, variation of parameters, linear systems of equations, and the Laplace transform. Use of standard computer software. Prerequisite: C- or better in MATH 162 or MATH 166 or permission of the department chairperson.

**MATH 377 - Complex Analysis (3)**
Algebra and geometric representation of complex numbers, properties of complex analytic functions, contour
integration, power series and Laurent series, poles and residues, conformal mapping, and applications.
Prerequisite: C- or better in MATH 267 or permission of the department chairperson.

MATH 390 - Honors Colloquium in Mathematics (1 TO 6)
Selected topics in mathematics with emphasis on individualized study.
A total of 6 credits may be earned.

MATH 391 - Teaching and Learning Mathematics in the Elementary School (3)
Development of pedagogical-content knowledge through national and state mathematics standards, curricular materials, instructional materials and methods, and assessment related to specific topics in elementary school mathematics. Class ideas applied in teaching situations. May be substituted for MATH 392.
Prerequisite: MATH 202 with a C- or better grade, admittance to Teacher Education; permission to enroll in 300/400-level professional education courses.

MATH 392 - Teaching Mathematics to Learners with Disabilities (3)
Introduction to standards, instructional materials and methods, and assessment, emphasizing how these relate to the teaching of mathematics to learners with disabilities. Class ideas applied in teaching situations. Three one-credit lectures and one one-hour laboratory experience per week. May not be substituted for MATH 391.
Prerequisite: MATH 207 with a C- or better grade or both MATH 201 and MATH 202 with a C- or better grade. Admittance to Teacher Education; permission to enroll in 300/400-level professional education courses.
Open only to special education majors.

MATH 393 - Teaching and Learning Mathematics in the Middle School (3)
Introduction to national and state mathematics standards, curricular materials, instructional materials and methods, and assessment related to topics taught in middle school mathematics.
Prerequisite: for teaching major in mathematics concentration 1 or concentration 2, MATH 250 with a grade of C- or better; for middle school/junior high mathematics license, MATH 202 with a grade of C- or better; permission to enroll in 300/400-level professional education courses.
Parallel: EDJH 385.

MATH 395 - Teaching and Learning Mathematics in the Secondary School (3)
Examination of national and state mathematics standards, curricular materials, and methods for teaching mathematics to secondary school students. Issues related to mathematics curriculum, instruction, and assessment of secondary school students. Class ideas applied in teaching situations.
Prerequisite: C- or better in MATH 250, and MATH 310 or MATH 311, and MATH 345 or MATH 360, and C or better in MATH 393; a minimum grade-point average of 2.5 in all mathematics courses that are to be applied to the major; admittance to teacher education, and permission to enroll in 300/400-level professional education courses.
Parallel: EDSE 380.

MATH 411 - Abstract Algebra 1 (3)
The theory of groups, including subgroups, cyclic groups, normal subgroups, cosets, Lagrange's Theorem, quotient structures, homomorphisms, automorphisms, group actions, Sylow's Theorems, structure of finite abelian groups, generators, and relations.
Prerequisite: C- or better in MATH 215 and MATH 217; or permission of the department chairperson.

MATH 412 - Abstract Algebra 2 (3)
Prerequisite: C- or better in MATH 411; or permission of the department chairperson.

MATH 415 - Mathematics of Coding and Communication (3)
Exploration of applications of number theory, group theory, and linear algebra to areas such as cryptography and error-correcting codes; applications of graph theory to resource allocation and route planning; other possible topics selected by the instructor.
Prerequisite: C- or better in MATH 215 or CS 124, and C- or better in MATH 217 or CS 224; or permission of the department chairperson.

MATH 416 - Theory of Numbers (3)
Topics include the division algorithm; positional notation; divisibility; primes; congruences; divisibility criteria; the sigma, divisor, and phi functions; diophantine equations; linear, polynomial, and simultaneous congruences; theorems of Fermat, Euler, Lagrange, and Wilson; quadratic reciprocity.
Prerequisite: C- or better in MATH 215; or permission of the department chairperson.

MATH 422 - Theory of Sampling and Surveys (3)
Survey designs; simple random, stratified, cluster, and systematic sampling; ratio estimates; regression estimates; cost and variance functions.
Prerequisite: C- or better in MATH 321 or its equivalent; or permission of the department chairperson.

MATH 428 - Regression and Time Series Models (3)
Addresses regression topics that include simple and multiple linear regression, polynomial regression, regression diagnostics, and forecasting. Introduces time series topics that include exponential smoothing, autoregressive, integrated, moving average (ARIMA) models, and forecasting.
Prerequisite: C- or better in MATH 321 or its equivalent; or permission of the department chairperson.

MATH 429 - Analysis of Variance in Experimental Design Models (3)
Multivariate normal distribution; quadratic forms; linear models; simple random, randomized block, Latin squares, factorial, split-plot, balanced incomplete block design; analysis of covariance; confounding; multiple comparison tests.
Prerequisite: C- or better in MATH 321 or its equivalent, or permission of the department chairperson.

MATH 441 - Geometry and Topology (3)
Introduction to geometric topology, including piecewise linear structures, Euler's formula, surfaces and solids, knots, graphs, and other topics.
Prerequisite: C- or better in MATH 217 and MATH 267; or permission of the department chairperson.

MATH 445 - Differential Geometry (3)
Fundamentals of differential geometry, as an extensive study of curves and surfaces in 3-space. Includes the use of computer visualization and emphasizes the importance of differential geometry in areas like relativity theory and modern physics.
Prerequisite: C- or better in MATH 217 and MATH 267; or permission of the department chairperson.

MATH 452 - Long-Term Actuarial Mathematics 1 (4)
Survival distributions, life tables, the mathematics of life insurance, life annuities, net premiums, gross premiums, and net premium reserves.
Prerequisite: C- or better in MATH 321 and MATH 351, or permission of the department chairperson.

MATH 453 - Long-Term Actuarial Mathematics 2 (4)
Mathematics of multiple life functions, multiple state models, multiple decrement models, valuation theory for pension plans, estimation of survival models based on empirical data, profit testing, and modeling of mortality improvement.
Prerequisite: C- or better in MATH 452 or permission of the department chairperson.

MATH 454 - Statistics for Risk Modeling (4)
Covers analytic methods for risk modeling including statistical learning, generalized linear models, time series models, principal components analysis, decision trees, and cluster analysis. These analytic methods will be applied to examples using the R statistical computing language.
Prerequisite: C- or better in MATH 321 or permission of the department chairperson.

MATH 456 - Introduction to Operations Research (3)
Topics include linear programming models, the simplex method, duality theory, transportation and assignment problems, network optimization models.
Prerequisite: C- or better in MATH 162 or MATH 166, and in MATH 217; or permission of the department chairperson.

MATH 457 - Short-Term Actuarial Mathematics 1 (4)
Loss and frequency distributions, limited expected value, parametric and non-parametric models, scale distributions, creating new distributions, insurance coverage modifications by deductibles and limits, effects of inflation, aggregate distributions for collective and individual risk models, classical and Bayesian credibility models.
Prerequisite: C- or better in MATH 321 or permission of the department chairperson.

MATH 458 - Short-Term Actuarial Mathematics 2 (3)
Statistical methods for fitting parametric actuarial models, maximum likelihood estimation for censored or truncated data, hypothesis tests and model selection, basic ratemaking and loss reserving for property and casualty insurance, actuarial models for individual health insurance.
Prerequisite: C- or better in MATH 321 or permission of the department chairperson.

MATH 459 - Investments and Financial Markets (4)
Develops the student’s knowledge of the theoretical basis of corporate finance, financial models, and financial derivatives and the application of those models to
insurance and other financial risks. A knowledge of basic corporate finance is assumed.
Prerequisite: C- or better in MATH 267, MATH 320, and MATH 351, or permission of the department chairperson.

MATH 460 - History of Mathematics (3)
The development of mathematics from prehistoric times to the seventeenth century. Topics may include number concepts and numeration, algebra, geometry, trigonometry, analytic geometry, and calculus.
Prerequisite: C- or better in MATH 161 or MATH 165; or permission of the department chairperson.

MATH 462 - Numerical Analysis 1 (3)
Explores a variety of algorithms in numerical analysis/computation mathematics, with an emphasis on their theoretical and computational aspects. For the programming component of the course, mathematical software packages Matlab or Octave are used.
Prerequisite: C- or better in MATH 166, MATH 217, and MATH 374, or permission of the department chairperson.

MATH 464 - Numerical Methods for Differential Equations (3)
Numerical methods for solving differential equations: finite difference and finite element discretization techniques; direct and iterative methods; analysis of convergence and stability; and computer implementation of numerical algorithms.
Prerequisite: C- or better in MATH 374; C- or better in MATH 259 or CS 120; or permission of the department chairperson.

MATH 465 - Topics in Computational Mathematics (1 TO 6)
Selected topics in computational mathematics, with an emphasis on applications of current mathematical software on computers to solve real-world problems.
Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

MATH 470 - Intermediate Analysis (3)
Introduction to basic concepts of analysis: the real numbers, sequences, continuous functions, the derivative, and the Riemann integral.
Prerequisite: C- or better in MATH 166 and MATH 215, or permission of the department chairperson.

MATH 471 - Real Analysis 1 (3)
Real number systems: least upper bound property, Archimedean property and their consequences; Basic topology; cardinality, metric spaces, completeness, compactness, connectedness; Numerical sequences and series: convergence tests, upper-lower limits; Continuity: continuous functions, uniform continuity, Intermediate and Extreme Value Theorems; Differentiability; L'Hospital's Rule, Taylor's Theorem. Time permitting, instructors may add more material that exemplifies the above topics.
Prerequisite: C- or better in MATH 215 and MATH 267, or permission of the department chairperson.

MATH 472 - Real Analysis 2 (3)
Prerequisite: C- or better in MATH 471; or permission of the department chairperson.

MATH 473 - Boundary Value Problems (3)
Fourier Series and integrals, heat and wave equations in one dimension, Laplace's equation in two dimensions, problems in higher dimensions, numerical methods of solving boundary value problems.
Prerequisite: C- or better in MATH 374; or permission of the department chairperson.

MATH 475 - Topics in Partial Differential Equations (3)
Classical solution techniques for linear PDEs. Topics include first- and second-order equations, method of characteristics, special functions, orthogonal polynomials, transforms, Green's functions, and fundamental solutions. A computer algebra system is utilized.
Prerequisite: C- or better in MATH 267 and MATH 374; or permission of the department chairperson.

MATH 496 - Capstone Course for Mathematics Teaching Majors (3)
Accompanies the student teaching experience of mathematics teaching majors.
Prerequisite: C or better in MATH 395, or permission of the department chairperson.
Parallel: EDSE 460, EDSE 465.

MATH 497 - Student-Faculty Colloquium (1 TO 6)
Participatory colloquium experience for motivated students. A contemporary topic of broad mathematical interest is chosen each semester. Each student is paired with a faculty member. These pairs work together to develop and present components of the semester-long course.
Prerequisite: C- or better in MATH 267; or permission of the department chairperson.
A total of 6 credits may be earned.

**MATH 498 - Senior Seminar (2)**
Development of a focused, connected, contemporary perspective of actuarial or mathematical science relevant to a student's area of study. Each student will research and complete a substantial project, which culminates in a final report, presented both in oral and written forms.
Prerequisite: senior standing or permission of the department chairperson.
Open only to mathematical sciences majors.

**MATH 499 - Reading and Honors (1 TO 8)**
Juniors and seniors, with the approval of the mathematical sciences department, may enroll for special advanced work not offered in courses at the 300- and 400-levels.
Prerequisite: approval of the department chairperson.
A total of 8 credits may be earned.
Open only to juniors and seniors.

**MEDT - MEDICAL TECHNOLOGY**

**MEDT 401 - Urinalysis (1 TO 10)**
A study of basic renal anatomy, physiology, and pathology, as well as training in the preparation of patients and collection of urine samples, conduct of routine and special tests of urine, and identification of the various formed elements in urine sediment.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 402 - Serology (1 TO 10)**
Prerequisite: BIO 444.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 403 - Microbiology (1 TO 10)**
Study of pathogenic organisms (bacteria, mycobacteria, fungi, and animal parasites), emphasizing isolation, culture, identification, and antibiotic sensitivity.
Experience in media preparation, staining techniques, and various biochemical and serological tests for identification and sensitivity.
Prerequisite: BIO 341, BIO 444.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 404 - Blood Bank (1 TO 10)**
Theory and practice of blood bank organization and procedure. Genetics and immunology of blood group systems; selection of donors; collection, processing, and storage of blood; preparation of blood products; typing, compatibility, and pretransfusion tests.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 405 - Special Topics in Medical Technology (1 TO 10)**
Study of a variety of topics of special interest in the field of medical technology. Areas discussed may include medical technology education, management of clinical laboratories, laboratory and research topics including radioimmunoassay, clinical correlation, and mathematical applications in medical technology.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 406 - Medical Chemistry (1 TO 10)**
Theory and application of physiology, biochemistry, and organic chemistry in the laboratory diagnosis of abnormal metabolism. Experience with a variety of manual and automated test procedures, including preparation of patient samples, instrument calibration and maintenance, and quality control.
Prerequisite: CHEM 360.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 407 - Hematology (1 TO 10)**
Study of blood, other body fluids, and bone marrow: cells, coagulation processes, and pathological conditions.
Practice in collection of samples, staining procedures, and various tests concerned with cells and clotting mechanisms, including experience with related instrumentation.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

**MEDT 408 - Clinical Practicum (1 TO 10)**
Includes rotations throughout all areas of the clinical laboratory following all pertinent didactic courses.
Students learn time management, multi-tasking and team participation as they work alongside clinical laboratory scientists in each section. Basic operation and function of all the instrumentation as well as common trouble-shooting and problem resolution are emphasized. This course primarily focuses on practical skills, but correlation with clinical material is included as well.

A total of 10 credits may be earned.
Open only to medical technology majors in clinical year.

**METC - METEOROLOGY-CLIMATOLOGY**

**METC 230 - Elementary Meteorology (3)**
Introductory presentation of basic meteorological processes with a focus on applying theory to the analysis and forecasting of local weather conditions.

**METC 330 - Weather Analysis (3)**
Presentation and practice of synoptic- and meso-scale diagnostic analysis techniques, including a review of satellite and radar remote sensing systems and image interpretation. Introduction to numerical weather prediction.
Prerequisite: METC 230.

**METC 331 - Global Climatology (3)**
Introduction to the dynamics of the global climate system. Emphasizes the physical processes that force spatial variability in climate, and the feedback mechanisms associated with global teleconnections and climate change.
Prerequisite: METC 230.

**METC 332 - Climate Change and Modification (3)**
Study of the variability of climate over time and space, and factors involved. Focuses on past climates, modeling of future climates, and modification at local or microscale.
Prerequisite: METC 230.

**METC 334 - Atmospheric Hazards (3)**
Examination of the causes, consequences, and spatial distribution of hazards deriving from or impacting the atmosphere. Both the physical properties and processes of natural hazards (e.g. hurricanes, tornadoes, biochemical) and the human actions and reactions to these hazards will be emphasized at the local, regional, and global scales.
Prerequisite: METC 230.

**METC 410 - Broadcast Meteorology (3)**
Survey of weathercasting including history, current practice, and presentation techniques. Also examines methods for communicating scientific information to non-scientists. Includes a practicum where students present forecasts.
Prerequisite: METC 330.

**METC 425 - Physical Meteorology (3)**
Study of the physical processes of the atmosphere with a focus on solar and terrestrial radiation, clouds, and precipitation.
Prerequisite: METC 330 and MATH 165 and PHYC 120.

**METC 426 - Client-Based Forecasting (1 TO 3)**
Works with the Cardinal Weather Service to generate meteorological and climatological products tailored to the specific needs of various clients, as well as routine forecasts for Muncie, Indiana. Instructor permission required.
A total of 12 credits may be earned, but no more than 3 in any one semester or term.

**METC 435 - Satellite, Radar, and Forecasting (3)**
Study of the tools used to remotely sense and analyze the atmosphere, including meteorological satellites, Doppler radar, and computer models. Emphasis is on the applications of satellite, radar, and computer model products to short and medium range weather forecasting. Includes an overview of forecast techniques and a forecasting practicum.
Prerequisite: METC 330.

**METC 447 - Thermodynamic Meteorology (3)**
Application of physical gas laws such as the equation of state and hydrostatic equation to investigate adiabatic processes and parcel theory as they relate to atmospheric instability and connective development.
Prerequisite: METC 330 and MATH 165 and MATH 166 and PHYC 120 and PHYC 122.

**METC 449 - Synoptic Meteorology (3)**
Investigation of synoptic- and mesobeta-scale atmospheric systems, with a focus on mathematical and physical theories of weather forecasting and application of those theories through the use of satellite, radar, and numerical weather prediction technology.
Prerequisite: METC 330 and MATH 165 and PHYC 120.

**METC 450 - Mesoscale Meteorology (3)**
Survey of mesoscale-related phenomena of the atmosphere, including thunderstorms, tornadoes, and lake-effect snow. Includes information about forecasting the occurrence and evolution of such phenomena with tools like Skew-T diagrams and Doppler radar.
Prerequisite: METC 330.
**METC 451 - Dynamic Meteorology (3)**
Study of the variables that explain four-dimensional atmospheric behavior with primary focus on synoptic-scale processes. Special attention is given to the governing equations and associated approximation and assumption relevant to numerical weather prediction.
Prerequisite: METC 330 and MATH 165 and MATH 166 and PHYC 120 and PHYC 122.

**METC 490 - Field Observation of Severe Local Storms (6)**
Multi-week field trip to the Great Plains region to forecast, observe, and document thunderstorms and related phenomena such as lightning, hail, and tornados. Trip is preceded by a series of lectures on storm behavior, extreme weather forecasting, and safe chasing techniques.
Prerequisite: permission of the instructor.

**MGT - MANAGEMENT**

**MGT 243 - Dynamics of Family Business (3)**
Examination of key challenges unique to family business and family business succession, and a comparison to non-family owned firms.

**MGT 261 - Personnel and Supervision (3)**
Introduction to the personnel and supervisory functions in organizations. Focuses on employee and union relationships; environmental business and social responsibilities; and leadership and supervision techniques, especially for the first-line supervisors.
Not open to BS or BA candidates for a major in the Miller College of Business.

**MGT 271 - Introductory Organizational Behavior (3)**
Study of human behavior in organizational settings. Topics covered include individual behavior; group processes including leadership, motivation, and organizational change. Special emphasis is placed on how these concepts can be applied in an organizational setting.
Not open to students who are BS or BA candidates for a major in the Miller College of Business.

**MGT 299X - Experimental/Developmental Topics (1 TO 6)**
Topics relevant to the discipline. Course titles will be announced before each semester.
A total of 6 credits may be earned.

**MGT 300 - Managing Behavior in Organizations (3)**
Examines the challenges of managing human behavior in organizations. Reviews foundations of modern management thought. Discusses current and emerging management topics: emphasizes leadership, motivation, communication, human relations, group dynamics, job design, organizational development, and managing a diverse workforce.
Prerequisite: sophomore standing; C or better grade in ECON 116 or ECON 201.

**MGT 301 - International Management (3)**
Discussion of management issues related to doing business in an international context, including moving a firm into international competition, and some issues that may be expected. Topics covered include exporting, joint venturing, or licensing as options for global expansion.
Prerequisite or parallel: MGT 300.

**MGT 305 - Job Search and Transition (1)**
Prepares students for moving from college to careers. Topics covered include defining career goals, writing resumes, job-search correspondence, interviewing, and initial adjustments in the first job position.
Prerequisite: sophomore standing.

**MGT 361 - Foundations of Human Resource Management and Employee Relations (3)**
Talented human resources are arguably the most valuable assets of any organization. This course introduces students to the various components of managing human talent, which is typically managed through an organization's Human Resources department. Topics include: selection, training, compensation, promotion, and transfer of workers; working conditions; employee services and industrial relations.
Prerequisite or parallel: MGT 300.

**MGT 363 - Talent Management (3)**
The advent of new technology and shifting competitive climates means that businesses must nurture potential leaders and equip their employees to change with their organizations. This course examines the process of preparing employees for both existing jobs and future advancement. Topics include: training needs assessment, design and delivery, training procurement process, and design of employee development plans.
Prerequisite: MGT 361.

**MGT 365 - Employment Law (3)**
Examines the laws, regulations and agencies governing employment practices, discrimination, labor unions,
employee benefits, occupation safety and health, workers compensation, privacy in the workplace, equal employment opportunity, and affirmative action. Prerequisite: MGT 300.

MGT 369 - Management Internship (3)
Job experience (paid) in an organization with an approved innovative management program. Requires periodic reports that will be evaluated by the assigned faculty member and the intern’s supervisor. Prerequisite: MGT 300; permission of the department chairperson or internship coordinator.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MGT 390 - Honors Colloquium: Readings in Contemporary Business (1 TO 6)
Seminar involving study of contemporary business literature. Interdisciplinary approach, comparing and contrasting ideas, deriving common themes, and drawing links to theory embodied in readings. Prerequisite: junior standing in Miller College of Business; completion of the “rule of nine.”

A total of 6 credits may be earned.
Open only to Honors students; others may enroll by permission of the department chairperson.

MGT 399 - Management Practicum (1 TO 6)
Professional practice (unpaid) in an organization with an approved innovative management program. Required periodic written progress reports that will be evaluated by the assigned faculty member and the intern's supervisor. Topic selected will depend on student's option.
Prerequisite: senior or second-semester junior standing; permission of the department chairperson.
A total of 6 credits may be earned including MGT 369.

MGT 409 - Business Ethics (3)
Students examine the ethical side of enterprise. All of the facets of personal integrity and organizational responsibility are covered. Open only to junior or senior Miller College of Business majors, or by permission of the department chairperson.

MGT 461 - Managing Total Rewards (3)
The strategic design of employee rewards in the form of compensation and benefits is crucial to businesses that want to attract and retain quality employees. This course examines all components of compensation, including forms of pay, legal considerations and government regulations, worker classifications, and pay policies as well as special conditions of executive and expatriate pay and global compensation issues. Prerequisite: MGT 361 and 365.

MGT 463 - Global Human Resource Management (3)
Increased globalization has led to increased needs for global talent management. This course evaluates the unique parameters of Human Resource Management in the international context. Topics include: staffing international assignments, international training and development, international compensation and performance management, and re-entry and other career considerations. Prerequisite: MGT 301 and 361.

MGT 465 - Talent Acquisition and Retention (3)
Finding and retaining top talent is a major goal for any organization. This course guides students through the processes of recruiting, selecting, and retaining talented and committed employees. Emphasis in the course is placed on the role of Human Resource professionals in the talent and acquisition and retention processes. Prerequisite: MGT 361 and 365.

MGT 467 - Leadership and Change Management (3)
Explores the theory and practice of leading and managing employees. Focuses on various approaches for leading employees, motivating and empowering employees, and leading and managing organizational change. Prerequisite: MGT 361 and 365.

MGT 469 - Contemporary Issues in Human Resource Management (3)
Integration of various contemporary principles, theories, and techniques for solving realistic and complex human resource management problems in public and private organizations. Includes lectures, tours, readings, cases, and the completion of a major individual project. Prerequisite: MGT 461 and 465; completion of all management core courses.

MGT 491 - Business Policy and Strategic Management (3)
Integration of various functional areas of business. Development and administration of strategy and policy in private and public sector organizations. Case studies focus on strategic decisions that enable an organization to relate effectively to its industrial, national, and international environments. Normally taken during the last semester of a student's program. Prerequisite: senior standing; completion of all Miller College of Business core classes including BL 260, FIN 300, ISOM 249, 351, MGT 300, MKG 300, MATH 132 or 161 or 162 or 165 or 166. No simultaneous enrollment allowed.
MGT 495 - Special Topics in Management Sciences (1 TO 3)
Exploration of special topics in management of interest to faculty and students. May be repeated for credit with different topics. Prerequisite: permission of the department chairperson. A total of 9 credits may be earned, but no more than 3 in any one semester or term.

MGT 497 - Independent Study (1 TO 9)
Supervised study of some phase of management. May consist of an experiment, library research, or an analysis of current management practices and methods. Prerequisite: senior standing; permission of the department chairperson. A total of 9 credits may be earned.

MGT 498 - Seminar in Management (1 TO 6)
Explores current problems, theory, research, and trends in management. Will vary depending upon the current status of managerial research, the instructor, and the needs and interests of the students. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

MIL - MILITARY SCIENCE
MIL 101 - Introduction to Military Science (1)
Studies the organization, history, and traditions of the United States Army and the characteristics and skills that future leaders will need to develop. Covers military skills such as first aid, rifle marksmanship, and land navigation. Open to all students.

MIL 102 - Introduction to Leadership (1)
Incorporates small group exercises with various military and communication skills to introduce the real world situations that future leaders may face. Includes active participation in discussions and activities. Builds on topics discussed in MIL 101. Open to all students.

MIL 201 - Leadership/Military Tactics (2)
Examines light infantry tactics. Introduction to squad movement techniques, ambushes, reconnaissance, movement to contact, advanced land navigation, drill and ceremony, first aid, and weapons. Open to all students.

MIL 202 - Leadership/Team Development (2)
Continued study of tactical leadership development. Focuses on operations orders, communication skills, weapons, map reading, and drill and ceremony. Open to all students.

MIL 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Titles to be announced before each semester. Prerequisite: enrollment in military science; permission of the department chairperson. A total of 6 credits may be earned. Open only to minors in military science.

MIL 301 - Military Leadership and Operations 1 (3)
Introduction to military planning methodology. Develop oral and written communication skills through an introduction to small unit tactics and operations. Prerequisite: MIL 202; permission of the department chairperson. Open only to minors in military science.

MIL 302 - Military Leadership and Operations 2 (3)
Continues the methodology of MIL 301. Analysis of leadership and management problems using military tactics at the squad level. Train on individual skills. Prerequisite: MIL 301; permission of the department chairperson. Open only to minors in military science.

MIL 355 - Land Warfare (3)
Study of land warfare to develop awareness of the military establishment-society relationship, particularly in the United States. Includes evolution of land warfare and progression of military professionalism focusing on army operations, awareness of history and purpose of joint operations, and the role of history in understanding their profession. Prerequisite: permission of the department chairperson. Open only to minors in military science.

MIL 401 - Leadership Challenges and Goal-Setting (3)
Plan, conduct, and evaluate activities of the ROTC cadet organization. Develop confidence in skills to lead people and manage resources. Develop counseling and motivating techniques. Prerequisite: MIL 302; permission of the department chairperson. Open only to minors in military science.

MIL 402 - Leadership Challenges and Goal-Setting (3)
Continues the methodology of MIL 401. Refine counseling and motivating techniques and prepare for a future as a successful Army lieutenant. Prerequisite: MIL 401; permission of the department chairperson. Open only to minors in military science.

MIL 499 - Independent Study in Military Science (1 TO 3)
An opportunity to investigate a topic of particular interest to the student under the supervision of a faculty member. Extensive reading, research, analysis, and writing.
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Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.

MKG - MARKETING

MKG 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

MKG 300 - Principles of Marketing (3)
Introduces marketing principles, functions, and contemporary practices essential for attaining organizational objectives. Topics include the marketing environment and technology, marketing research, consumer behavior, market segmentation, product management, professional selling, advertising, pricing, distribution channels, strategy implementation, and the role of marketing in society. Prerequisite: sophomore standing; minimum grade of C in ECON 116 or 201.

MKG 310 - Consumer Behavior (3)
Introduces the end-user consumption process. The impact of external factors such as culture and subculture, as well as psychological factors such as motivation and perception on consumer decision-making process are discussed. Examines how marketing managers use the information obtained from consumers' consumption process in planning effective marketing strategies. Prerequisite: MKG 300.

MKG 320 - Advertising Management (3)
Examines advertising as a communication tool in an organization's promotional mix. Focuses on the basics of designing an effective advertising campaign. Topics include promotional research, selecting a target audience, objectives and strategies, creative executions, and media. The aspects of advertising in our economy and society are also examined. Prerequisite: MKG 300. Prerequisite recommended: MKG 310.

MKG 325 - Professional Selling (3)
Detailed introduction to and application of the principles of personal selling as applied to persons pursuing any vocation, as well as those aspiring to careers in marketing. Prerequisite: minimum grade of C in ECON 116 or 201. Prerequisite or parallel: MKG 300.

MKG 330 - Retail Management (3)
An investigation of store policies, organization, location, layout, buying, stock control, pricing, and sales promotion for retail stores. Prerequisite: MKG 300.

MKG 345 - Procurement and Supply Management (3)
Focuses on value creation through sourcing methods and activities. Principal topics include: purchasing process, supply development and fulfillment, negotiations, supplier evaluation/selection, supply base management, contract management, global sourcing, leveraging sustained competitive advantage, supply information systems/electronic commerce, source performance assessment, supplier quality enhancement, purchasing service, and ethics. Prerequisite: MKG 300.

MKG 350 - Marketing Research and Analytics (3)
Focuses on the principle and strategic concepts of collecting and using primary and secondary data to make informed business decisions. The analysis will focus on marketing decisions related to customer acquisition, customer retention, and brand management. Prerequisite: MKG 300 and ECON 221.

MKG 369 - Professional Practice in Marketing (1 TO 3)
Professional experience as an intern with an approved organization under the supervision of a departmental faculty member. Prerequisite: MKG 300 and permission of the department chairperson or internship coordinator. Course may be repeated for credit. Registration limited to 3 credits per semester. For marketing majors, a maximum of 6 credits may be taken across a combination of MKG 369, 495, 497, and 498. For marketing minors, the maximum combined limit is 3 credits.

MKG 375 - Social Media Marketing (3)
Study of social media as a means of marketing products and services to both consumers and organizational markets. Focuses on developing strategies for targeted social media campaigns, implementing platforms and tactics to meet those strategic goals, determining metrics and analytics for measuring success, and addressing current technology associated with the social media environment. Prerequisite: MKG 300.

MKG 400 - Product Management (3)
Examines the process of developing and managing products and brands as part of the organization's marketing strategy. Possible topics are designing new products, competitive positioning, creating and maintaining strong brand identities, and enhancing brand equity. Prerequisite: MKG 300.

MKG 410 - Marketing Channels (3)
Study of marketing channels in the distribution strategy for products and services to both consumer and organizational markets. Emphasis on understanding the nature of channel functions, institutions (wholesaling, retailing, and
facilitating), design issues, conflict and control issues, managing channel relationships, and impact of new technologies. Prerequisite: MKG 300.

MKG 420 - Integrated Marketing Communications (3)
Uses discussion, cases, and problems to give experience in making decisions on a firm's promotional mix, and creating and presenting integrated promotional campaigns. Focuses on promotional research; market analysis; campaign, creative and media strategy; budget allocation; creative campaign design; and media selection and scheduling. Prerequisite: MKG 300. Not open to students who have credit in MKG 320.

MKG 425 - Seminar in Advanced Professional Selling (3)
Introduces advanced topics in professional selling. Emphasis on relationship management and negotiation. Each student will work with a sales coach from industry. Multiple video-taped role playing exercises will be a major part of this class including a video-taped role play in the field. Prerequisite: MKG 300, 325; permission of the department chairperson.

MKG 427 - Sales Management (3)
Policies and practices in organizing, recruiting, selecting, training, compensating, motivating, and controlling the sales force. Prerequisite: MKG 300, 325.

MKG 429 - Sales Technology Application (3)
Explores computer and communication technologies as they apply to business-to-business selling and sales management. Content focuses on using technology to improve customer relationship management (CRM) and sales performance. Topics include technology as it applies to: the sales process, CRM, time and territory management, forecasting, and sales presentations. Prerequisite: MKG 300, 325.

MKG 431 - Retail Strategy (3)
Examines the diversity and dynamism of the retail industry and its strategies for success. Topics include retail market segmentation and positioning, strategies used to promote retail brand image, techniques used to select store sites, strategies to create market entry, and other competitive strategies. Prerequisite: MKG 300.

MKG 432 - Sales Strategy (3)
This course focuses on developing strategic approaches to the selling effort. This includes examining the roles of traditional sales forces, team selling, and national account management. Other topics include time and territory management, developing and using visual aids, customer incentives, and negotiation. Course work in this class will include extensive role-playing exercises. Prerequisite: MKG 300, 325; permission of the department chairperson.

MKG 450 - Advanced Marketing Research and Analytics (3)
In-depth look into the details of conducting market research including marketing decision making, database marketing, marketing analytics and related issues. Prerequisite: MKG 350 or BA 305 or BA 345 or permission of the department chairperson.

MKG 460 - Strategic Supply Chain Management (3)
Focuses on strategic perspectives and processes for managing activities to optimize the effectiveness and efficiency of the supply system. Topics include logistics network configuration, inventory management/risk-pooling, information value, supply chain design and integration, strategic alliances, outsourcing, international issues, customer value, and information technology. Prerequisite: MKG 300.

MKG 470 - International Marketing (3)
Examines the opportunities and problems associated with conducting business on a global scale. Focuses on the knowledge and skills needed for identifying, evaluating, and managing international marketing functions. Students are introduced to the economic, socio-cultural, financial, and legal-political factors affecting international marketing. Prerequisite: MKG 300.

MKG 475 - Marketing Simulation (3)
Structured around a marketing management simulation exercise, students are divided into teams to operate business firms. Each team develops and implements a strategic plan, making tactical operating decisions. Addresses the complexity of integrating marketing, finance, and production while operating in a global environment. Prerequisite: MKG 300; junior standing.

MKG 476 - Executing Social Media Marketing (3)
Building upon the skills learned in MKG 375, students will have the opportunity to work in teams with real world clients to develop and execute social media marketing plans to meet client objectives. A key component of the course will be developing and measuring appropriate metrics of success. Prerequisite: MKG 375.

MKG 480 - Marketing Strategy (3)
Marketing strategy as a plan for allocating an organization’s resources across the elements of the marketing mix to gain a distinctive competitive advantage and to achieve organizational objectives. Strategies of
existing corporations may be profiled or a case approach may be used in this project-oriented course. Prerequisite: MKG 300, 310, 325, 350 and one additional MKG elective; senior standing or permission of the department chairperson.

MKG 495 - Seminar in Marketing (3)
Advanced examination of such current marketing topics as marketing theory and quantitative, service, nonprofit, bank, comparative, and international marketing. Specific content is announced when offered. Prerequisite: MKG 300 and senior standing or permission of the department chairperson. Registration limited to 3 credits per semester. For marketing majors, a maximum of 6 credits may be taken across a combination of MKG 369, 495, 497, and 498. For marketing minors, the maximum combined limit is 3 credits.

MKG 497 - Independent Study in Marketing (1 TO 3)
Independent study in some phase of marketing that may consist of a marketing research project or the analysis of current marketing practices. Prerequisite: MKG 300; permission of the department chairperson. A total of 3 credits may be earned across a combination of MKG 495, 497, and 498. Registration limited to 3 credits per semester. For marketing majors, a maximum of 6 credits may be taken across a combination of MKG 369, 495, 497, and 498. For marketing minors, the maximum combined limit is 3 credits. Open only to marketing majors and minors.

MKG 498 - Advanced Immersive Project in Marketing (3)
Immersive learning project in which students participate in multidisciplinary team-based project led by BSU faculty mentor(s) under auspices of Building Better Communities, Virginia Ball Center for Creative Inquiry, Provost's Immersive Learning Grant program, or department sponsored project. Student's participation in project must demonstrate meaningful marketing program relevance via application. Prerequisite: MKG 300; permission of the department chairperson or advisor; must fill out an application available in the departmental office. Registration limited to 3 credits per semester. For marketing majors, a maximum of 6 credits may be taken across a combination of MKG 369, 495, 497, and 498. For marketing minors, the maximum combined limit is 3 credits.

MMP - MUSIC, MEDIA AND PROD

MMP 100 - Survey of the Music Industry (3)
An overview of the recording, entertainment, and performing arts industries. Topics will include music merchandising, contracts and licensing, songwriting, publishing, live performance, and other career opportunities. An examination of the historical, aesthetic, and commercial developments of the music industry in the United States will be discussed.

MMP 125 - Acoustics (3)
An introduction to physical acoustics and psychoacoustics, with an emphasis on music and audio applications. Topics include the physical properties of sound, wave mechanics, acoustic measurements, tuning and temperament, and perceptual properties of sound. Prerequisite: permission of the director of the school.

MMP 140 - Computer Music 1 (3)
An introductory course in computer music. Topics include computer applications for audio synthesis, recording and processing, music concrete, and MIDI. Creative projects and laboratory time are mandatory. Prerequisite: permission of the director of the school.

MMP 201 - Pro Tools 101: An Introduction to Pro Tools (1)
Introduction to the basics of Avid Pro Tools through certified courseware. Topics include introduction and essentials of recording audio/MIDI plus techniques in basic editing, mixing, and automation. Offered credit/no credit only. Open only to music and TCOM majors.

MMP 202 - Pro Tools 110: Pro Tools Production 1 (1)
Further study of Avid Pro Tools through certified courseware. Using foundational skills learned in Pro Tools 101, Pro Tools 110 expands knowledge and techniques for hardware and software configuration, managing media, recording audio/MIDI, virtual instruments, editing, automation and mixing. Offered credit/no credit only. Prerequisite: MMP 201; or permission of the instructor. Open only to music and TCOM majors.

MMP 220 - Introduction to Electronics and Studio Maintenance (2)
An introduction to basic electronics as they apply to audio components. Topics also include basic studio testing and repair.

MMP 235 - Recording Technology 1 (3)
An introduction to the basics of recording technology. Topics include analog and digital recording systems, microphone design, microphone placement, and basic mixing techniques. Prerequisite: MMP 125 or MUST 122; or permission of the instructor.
MMP 236 - Recording Technology 2 (3)
Continuation of MMP 235. Topics include multitrack recording, multichannel mixing, signal processing, and problems in multiple microphone arrays and stereo imaging. Laboratory time is mandatory. Prerequisite: MMP 235; permission of the director of the school.

MMP 280 - Music Products and Industry (2)
Helps students prepare for entering careers in development, representation, and sale of music products. Students will learn about the design and manufacturing cycle, specifications and underlying theory for common pieces of musical equipment, and exclusive technologies of major brands. Prerequisite: MMP 100 and 236, or by permission from the director of MMP.

MMP 301 - Songwriting (2)
A continuation in the study of form, lyric development, and melodic structure of contemporary songwriting for commercial entertainment applications. An examination of lead sheet writing, demo production, copyright protection, and publishing of commercial songs is also provided. Prerequisite: permission of the instructor.

MMP 330 - Live Sound and Recording (3)
An advanced course in recording technology. Individual problems in recording master tapes of solo, ensemble, and large group repertoire. Each project requires seminar and laboratory participation. Prerequisite: MMP 236; permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MMP 335 - Mixing and Mastering (3)
An advanced lecture and project-oriented course centered on the audio production processes of mixing and mastering. Topics will include aesthetics of a mix as well as various processes and techniques relevant to music production. Students will engage in extensive critical listening throughout the course. Prerequisite: MMP 236; permission of the director of the school.

MMP 430 - Production Workshop (3)
An advanced course in technical application of music production oriented toward independent projects. Projects require a production product such as a technical demonstration, a broadcast quality program, an album, or an intermedia performance. Prerequisite: three credits of MMP 330; permission of the director of the school.

MMP 491 - Independent Study in Music Engineering Technology (1 TO 3)
Study of music engineering-related topic using reading, analysis, research, and development. Prerequisite: permission of the MMP program director. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MMP 492 - Special Topics in Music Media Production (1 TO 6)
Special topics, variable, in music media production and industry. Specific topics to be announced one semester in advance. Prerequisite: permission of the director of MMP. A total of 9 credits may be earned, but no more than 6 in any one semester or term. Open only to MMP and music technology majors.

MMP 494 - Internship (1 TO 3)
Preparation for, completion of, and documentation of an internship related to music production or the music industry. Students should consult with the MMP program director about arranging and preparing for the internship in the semester prior to the internship. Prerequisite: permission of the director of MMP. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to MMP and music technology majors.

MMP 495 - MMP Project/Recital (3)
Senior MMP project-recital. The project, in consultation with MMP faculty, may take the form of a composition recital, lecture recital, or significant development project with lecture presentation. Prerequisite: permission of the MMP program director.

MUHI - MUSIC: HISTORY
MUHI 100 - Introduction to Music (3)
A University Core Curriculum course that, through a survey of musical forms and compositions from early through contemporary times and the historical and social elements that helped to shape them, offers an introduction to the understanding and appreciation of the broad range of musical creativity. Core Transfer Library: Fine Arts (IFA 1330) Open only to students not majoring in music.

MUHI 105 - Music and Popular Culture in America (3)
A survey of the origins and development of popular music in America. Discussion includes blues, jazz, musical theatre, and rock. Emphasizes cultural and technical aspects of music.
MUHI 107 - History of Rock and Roll in America (3)
A survey of the origins and development of rock and roll music in America. Survey covers blues and rock and roll of the 1950s to the present, focusing on the various musical/compositional styles found within rock music throughout the decades. Emphasizes musical and compositional style throughout the decades, while also discussing cultural and political significance. Open only to non-music majors.

MUHI 139 - Perspectives of Jazz (3)
A survey of the origins and development of jazz from the late 19th century to the present. Open only to students not majoring in music.

MUHI 200 - Survey of Music Literature (2)
Survey of styles, forms, and masterworks of music emphasizing the period 1700 to 1975. Required for majors and minors. A C or better is required to continue in the music history sequence. Prerequisite: MUST 112.

MUHI 330 - Music History (3)
The development of music from its beginnings through 1750. Origins, growth of early polyphony, and instrumental music. Changes in style during medieval, Renaissance, and baroque periods. Prerequisite: a grade of C or better in MUHI 200 or departmental permission.

MUHI 331 - Music History 2 (3)
Traces the development of musical styles and compositional techniques from ca 1720 to the present, and examines the relationships between music, others arts, and broader socio-political contexts. Prerequisite: MUHI 200 and 330 or departmental permission. Open only to music majors.

MUHI 390 - Honors Colloquium in Music (2 OR 3)
Readings, reports, and discussions of various aspects of music. A total of 3 credits may be earned. Open only to students in the Honors Program.

MUHI 399 - Collegium Musicum (1)
The study, realization, and performance of medieval, Renaissance, and baroque music. Prerequisite: permission of the director of the school.

MUHI 401 - Piano Literature (2)
Survey of the standard literature for the piano from J.S. Bach through the mid-twentieth century. Prerequisite: MUHI 200, 331 or permission of the instructor.

MUHI 435 - Music in the Baroque Era (2)
The vocal and instrumental music of western Europe during the seventeenth and early eighteenth centuries, including figured bass, opera, oratorio, and cantata, and the development of such instrumental genres as concerto, sonata, and suite. Prerequisite: MUHI 200, 330.

MUHI 436 - Music in the Classical Era (2)
A survey of vocal and instrumental music of the eighteenth century, including the various styles that marked the transition from the baroque to classical music, the rise of comic opera, and the development of the symphony, concerto, sonata, chamber music, and keyboard literature. Prerequisite: MUHI 200 and 331. Open only to music majors.

MUHI 437 - Music in the Romantic Era (2)
Vocal and instrumental music in Western civilization in the nineteenth century, emphasizing lieder, choral, operatic, piano, chamber, and orchestral literature. Studies important composers and works from the various time periods: early, middle, late, and post-Romanticism. Prerequisite: MUHI 200, 331.

MUHI 438 - Opera History from 1780 to 1980 (2)
Types of opera and changing styles from the mid-eighteenth century to the present. Works from the standard repertoire will be considered in detail, and students will also be encouraged to explore less familiar operas. Prerequisite: MUHI 200, 331.

MUHI 441 - Jazz History (2)
A historical survey of jazz in America introducing students to the major stylistic eras and artists of jazz from the music’s origins in the late 19th century to the present. Prerequisite: MUHI 200. Open only to music majors and minors.

MUHI 488 - History of Harpsichord Literature and Design (1)
The harpsichord and its music from the Renaissance. Emphasis on baroque instruments and the music of Bach, Couperin, Handel, Rameau, and Scarlatti. The harpsichord revival, contemporary instruments, and literature. Prerequisite: MUHI 200 and previous keyboard study.

MUHI 491 - Independent Study in Music History (1 TO 3)
An opportunity for superior students to do guided reading and intensive study in topics in music history of particular interest to them and not available in regular offerings. Prerequisite: MUHI 200, 330, 331; permission of the director of the school. A total of 3 credits may be earned.
MUHI 492 - Special Topics in Musicology (1 TO 3)
Musicological topics and issues of special interest to students and instructor. Permits study of topics not formally treated in other courses. Prerequisite: MUHI 200; permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MUHI 493 - Workshop in Music History and Musicology (1 TO 3)
A one- or two-week workshop on special topics in music history and musicology. Prerequisite: MUHI 200; permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MUHI 496 - History of Organ Literature and Design (2)
The organ and its music from the Renaissance. Emphasizes baroque, romantic, and contemporary instruments and literature. Field trips to nearby instruments. Prerequisite: MUHI 200 and previous keyboard study.

MUHI 498 - Choral Music and Hymnody of the Church (3)
Hymns, anthems, motets, cantatas, and oratorios from the fifteenth century to the present; their musical, theological, and liturgical contexts and contemporary use. Prerequisite: MUHI 200; permission of the director of the school.

MUSC - SCHOOL OF MUSIC

MUSC 120 - Jazz: A Multicultural Legacy (3)
Study of the development of jazz with emphasis on multicultural contributions and interdisciplinary context--historical, political, economic, and social.

MUSC 140 - Large Instrumental Ensemble (0)
A major performing ensemble, rehearsing five hours a week. Included in this category are Wind Ensemble, Symphonic Band, Marching Show Band, Basketball Pep Band, Symphony Orchestra, and Jazz Ensemble I.

MUSC 141 - Large Instrumental Ensemble (0)
Organizations normally rehearsing two hours a week. Included in this category are Concert Band and Jazz Ensembles II and III.

MUSC 150 - Large Vocal Ensemble (0)
Major performing ensembles normally rehearsing five hours a week. Included in this category are the Concert Choir, Chamber Choir, Opera Chorus, University Singers, and Lab Choir.

MUSC 151 - Large Vocal Ensemble (0)
Organizations normally rehearsing two hours a week. Included in this category are University Chorus, Women's Chorus, and the Statesmen. Registration will not count toward minimum hourly requirements for graduation.

MUSC 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned. Open only to music students.

MUSC 340 - Large Instrumental Ensemble (.5 TO 3)
A major performing ensemble. Included in this category are the Wind Ensemble, Symphony Band, Marching Show Band, Basketball Pep Band, and Symphony Orchestra. A total of 24 credits may be earned, but no more than 3 in any one semester or term.

MUSC 341 - Large Instrumental Ensemble (.5 TO 3)
Organizations normally rehearsing two hours a week. Included in this category are the Concert Band and Jazz Ensembles II and III. A total of 24 credits may be earned, but no more than 3 in any one semester or term.

MUSC 350 - Large Vocal Ensemble (1 TO 3)
Major performing ensembles normally rehearsing five hours a week. Included in this category are the Concert Choir, Opera/Musical Theatre, and the University Singers. A total of 24 credits may be earned, but no more than 3 in any one semester or term.

MUSC 351 - Large Vocal Ensemble (.5 TO 3)
Organizations normally rehearsing two hours a week. Included in this category are the Women's Chorus, the Statesmen, the University Chorus, and the Lab Choir. A total of 24 credits may be earned, but no more than 3 in any one semester or term.

MUSC 372 - Musical Theatre Workshop (2 TO 10)
Study and performance of works for the musical theatre combining the art forms of music, drama, dance, and stagecraft as a performer or technician. A total of 10 credits may be earned.

MUSC 471 - Musical Theatre in America (2)
A study of the history of American musical theatre. A general overview of the repertoire.
MUSC 493 - Workshop in Music (1 TO 3)
A one- or two-week workshop on specialized interdisciplinary topics in music. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MUSC 499 - Recital (1)
Attendance at recitals and concerts as specified in the music student handbook is the basis for earning recital credit. Offered credit/no-credit only.

MUSE - MUSIC: EDUCATION
MUSE 100 - Introduction to Music Education 1 (2)
An overview of the music teaching profession with an emphasis on philosophical foundations, curricular concepts, principles of instruction, professionalism, and initial portfolio development. Practicum includes guided observations of K-12 music programs and introductory teaching opportunities. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: permission of the director of the school. Open only to music education majors.

MUSE 150 - Introduction to Music Education 2 (2)
Development of fundamental vocal performance techniques and performance skills on guitar, recorder, and other classroom instruments. Peer teaching experiences and introduction to classroom music repertoire for K-12 settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Open only to music education majors.

MUSE 250 - Brass Techniques (2)
Development of fundamental performance skills on two or more brass instruments. Examination of performance problems, diagnostic techniques, teaching strategies, and other specialized topics related to brass instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W.

MUSE 252 - Woodwind Techniques 1 (2)
Development of fundamental performance skills on flute, clarinet, and saxophone (minimum of two instruments). Examination of performance problems, diagnostic techniques, teaching strategies, and other specialized topics related to woodwind instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W.

MUSE 253 - Woodwind Techniques 2 (2)
Development of fundamental performance skills on oboe and bassoon. Examination of performance problems, diagnostic techniques, teaching strategies, and other specialized topics related to woodwind instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W.

MUSE 254 - Percussion Techniques (1)
Development of fundamental performance skills on concert percussion (snare drum, bass drum, cymbals), timpani, and keyboard percussion. Examination of performance problems, diagnostic techniques, teaching strategies, and other specialized topics related to percussion instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W.

MUSE 256 - String Techniques (2)
Development of fundamental performance skills on two or more string instruments. Examination of performance problems, diagnostic techniques, teaching strategies, and other specialized topics related to string instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W.

MUSE 258 - Voice Techniques (2)
Development of fundamental vocal performance technique. Examination of performance problems, diagnostic techniques, teaching strategies, vocal anatomy and acoustics, care of the voice, and other specialized topics related to singing instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150; permission of the director of the school.

MUSE 265 - Basic Music for Classroom Teachers (3)
Designed to help students understand music in the context of culture, history, society, and daily living. Provides students with opportunities to develop a broad range of critical thinking, communication, writing, and musical skills. Specifically, the course is designed to increase the future teacher's sensory musical experience through an investigation of the elements of music, the development of music literacy skills, the exploration of social instruments, and a survey of the heritage of world musics.

MUSE 350 - Contemporary Issues in Music Education: Practicum and Applications (2)
Observation and application of specialized music teaching techniques and curricular issues in ensemble and small group settings. Emphasizes performance-based assessment, classroom management, continued portfolio development,
cooperative learning strategies, reflective evaluation, and critical thinking skills. A weekly seminar includes music classroom application of universal design for learning, strategies for English language learners, reading in the content area, and special needs accommodations in the music classroom. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSP 290; and MUSE 100 and 150 and 351 and 353; and MUSE 355 or 356; and MUSE 375 or 376. Open only to music education majors.

MUSE 351 - Elementary General Music Methods (3)
Focuses on philosophy, approaches/methods, and materials needed to teach a general music course in elementary school settings. Emphasizes teaching skill development, musical development of children, performance-based assessment, technology, classroom management, continued portfolio development, and field experiences. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150; permission of the director of the school.

MUSE 353 - Secondary General Music Methods (3)
Focuses on philosophy, techniques, and materials needed to teach a general music course in middle and high school settings. Emphasizes teaching skill development, musical characteristics, needs of adolescents, performance-based assessment, technology, classroom management, continued portfolio development, and field experiences. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150; permission of the director of the school.

MUSE 355 - Instrumental Music Methods (String) (3)
Focuses on developing the knowledge, performances, and dispositions required of school instrumental music educators in elementary, middle school, and high school string/orchestra settings. Topics include administration, curriculum development, literature selection, instructional planning, and teaching strategies. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150, 258 and MUSP 290; permission of the director of the school. Open only to music majors and minors.

MUSE 356 - Choral Music Methods 1 (3)
Focuses on developing the knowledge, performances, and dispositions required of school choral music educators in elementary and middle school settings. Topics include administration, curriculum development, literature selection, instructional planning, and teaching strategies. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150 and 258 and MUSP 290; permission of the director of the school.

MUSE 375 - Instrumental Music Methods (Band) (3)
Focuses on developing the knowledge, performances, and dispositions required of school instrumental music educators in elementary, middle school, and high school band settings. Topics include administration, curriculum development, literature selection, instructional planning, and teaching strategies. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100, 150, 250, and 252; or permission of the director of the school. Open only to music majors and minors.

MUSE 376 - Choral Music Methods 2 (3)
Focuses on developing the knowledge, performances, and dispositions required of school choral music educators in the high school setting. Topics include administration, curriculum development, literature selection, instructional planning, and teaching strategies. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150 and 258 and MUSP 290; permission of the director of the school.

MUSE 390 - Instrumental Laboratory (0.5)
Laboratory ensemble provides setting for the development and performance-based assessment of instrumental rehearsal techniques for the school teacher. The cooperative learning atmosphere allows lab participants to begin developing a repertoire of effective strategies. Prerequisite: permission of the director of the school. A total of 1 credit may be earned, but no more than .5 in any one semester or term.

MUSE 391 - Choral Laboratory (0.5)
Laboratory ensemble provides setting for the development and performance-based assessment of choral rehearsal techniques for the school teacher. The cooperative learning atmosphere allows lab participants to begin developing a repertoire of effective strategies. Prerequisite: permission of the director of the school. A total of 1 credit may be earned, but no more than .5 in any one semester or term.

MUSE 451 - Marching Band Techniques (2)
Organization and administration of marching bands in school settings. Principles and objectives, show
construction, field maneuvers, rehearsal techniques, music selection, and charting techniques will be studied.
Prerequisite: MUSE 100; MUSC 340; permission of the director of the school.

MUSE 455 - Instrument Maintenance and Repair (2)
Laboratory setting used to develop practical skills in cleaning, lubricating, and repairing wind, percussion, and string instruments. Focuses on proper diagnostic techniques, tool and material selection, and minor repair procedures. Prerequisite: permission of the director of the school.

MUSE 456 - Principles of String Teaching: Seminar and Practicum (2)
Sequence and methods of string instrument instruction. Private and group teaching strategies and materials. Observation and comparison of contemporary approaches. Practicum teaching in pre-collegiate private or group settings. Prerequisite: MUSE 256 or permission of the instructor. Open to music education and performance majors.

MUSE 457 - Specialized Approaches For Vocal/General Majors (3)
Continuing study of music teaching methodologies in elementary general and secondary vocal programs. Topics include an in-depth focus on the approaches of Orff and Kodaly, and a project-based emphasis on organizing and directing madrigal singers, vocal jazz ensembles, show choirs, and musical productions at the middle and high school levels. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or W. Prerequisite: C or better grades in MUSE 100 and 150 and 258 and 351 and 353 and 356 and 376; and MUSP 290; permission of the director of the school.

MUSE 458 - Methods of Organ Teaching (1)
An examination of the methods of teaching the pipe organ. An application of these methods to recital literature and the music of the church. Prerequisite: previous organ study at the university level or permission of the director of the school.

MUSE 465 - Jazz Pedagogy (2)
Designed to prepare the future educator to run a jazz program in multiple school settings. Includes preparation in the administration and teaching techniques for the jazz ensemble and combo. Budgets, guest artists/clinicians, and festivals will be covered. Prerequisite: permission of the director of jazz studies (only for jazz/commercial music minors); or junior standing. Open only to music majors and minors.

MUSE 470 - Student Teaching in Music (7)
Required for the standard license in all-grade education. Involves a full-day assignment for 16 weeks in a public elementary, junior high/middle, and/or secondary school. Prerequisite: MUSE 350 and permission of the department chairperson. A total of 7 credits may be earned. Open only to music education students.

MUSE 478 - Teaching Multicultural Music (2)
Exploration of music from various ethnic groups and cultures. Emphasizes techniques and materials to present music from various cultures to elementary and secondary students. Includes teaching projects and integration with traditional music curricula. Prerequisite: permission of the director of the school.

MUSE 491 - Independent Study in Music Education (1 TO 3)
An opportunity for superior students to conduct intensive study and research in a particular component of music education. Prerequisite: permission of the director of the school. A total of 5 credits may be earned, but no more than 3 in any one semester or term.

MUSE 492 - Special Topics in Music Education (1 TO 6)
Consideration of topics, problems, and issues in music education of special interest but not formally treated in other courses. Prerequisite: MUSE 100; permission of the director of the school. A total of 12 credits may be earned, but no more than 6 in any one semester or term. Open only to music students.

MUSE 493 - Workshop in Music Education (1 TO 3)
A one- or two-week workshop on special topics in music education. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MUSP - MUSIC: PERFORMANCE
MUSP 130 - Small Ensemble (Woodwinds) (0)
Players of woodwind instruments are organized into small groups according to proficiency for the study of music of all periods with emphasis on chamber music style of playing.

MUSP 131 - Small Ensemble (Brass) (0)
Players of brass instruments are organized into small groups for the study and performance of the brass ensemble literature. May include trios and quartets of like instruments, or quintets, sextets, and octets of mixed brasses.
MUSP 132 - Small Ensemble (Percussion) (0)
Players of percussion instruments are organized into small groups for the study and performance of literature designed for their public performance. May range in size from trios and quintets to larger ensembles.

MUSP 133 - Small Ensemble (String) (0)
Players of string instruments are organized into small groups according to proficiency for the study of music of all periods with emphasis on the chamber music style of playing.

MUSP 134 - Small Ensemble (Harp) (0)
Groups of harpists are organized to perform the specialized literature for this unusual ensemble. Original compositions and transcriptions are presented in public performance.

MUSP 135 - Small Ensemble (Piano) (0)
Study of sonata literature in conjunction with another instrument or literature for multiple pianos. Small groups are organized according to proficiency and demands of the literature.

MUSP 136 - Ensemble for New Music (0)
Players of all instruments are organized into small groups for the study of contemporary chamber music.

MUSP 137 - Small Ensemble (Organ and Church Music) (0)
Performance projects of interest to the organist and church musician. Reading of anthems, motets, oratorio movements; music for organ and instruments; music for graded church choirs; and conducting from the keyboard.

MUSP 138 - Small Ensemble (Vocal) (0)
Quartets, sextets, octets, and multiples of these units are arranged as enrollment indicates. Music studied and performed ranges from traditional quartet literature to material appropriate for glee clubs.

MUSP 139 - Small Ensemble (Guitar) (0)
Guitar players are organized into small groups to study and perform the duet, trio, and quartet repertoire for classical guitar. Upperclass students generally study ensemble works involving other instrumentation such as guitar and flute; guitar and strings; and guitar and voice.

MUSP 200 - Major Study (1 TO 4)
One primary instrument/voice lesson per week for students majoring in guitar, organ, piano, symphonic instruments, or voice. Prerequisite: permission of the director of the school. A total of 30 credits may be earned, but no more than 4 in any one semester or term.

MUSP 201 - Principal Study (1 TO 4)
One primary instrument/voice lesson per week for students majoring in music composition, music education, or music technology. Prerequisite: permission of the director of the school. A total of 30 credits may be earned, but no more than 4 in any one semester or term.

MUSP 202 - Secondary Study (1 TO 4)
One secondary instrument/voice lesson per week. Prerequisite: permission of the director of the school. A total of 30 credits may be earned, but no more than 4 in any one semester or term.

MUSP 203 - Minor Study (1 TO 4)
One primary instrument/voice lesson per week for non-music majors. Prerequisite: permission of the director of the school. A total of 30 credits may be earned, but no more than 4 in any one semester or term.

MUSP 204 - Jazz Study (1 TO 2)
One instrument/voice lesson per week for students studying jazz/commercial style. A total of 20 credits may be earned, but no more than 2 in any one semester or term. Open only to music majors and minors.

MUSP 206 - Piano Accompanying (1 TO 3)
One lesson each week is devoted to practice and coaching on the materials of accompaniment as performed during a specified three-hour period each week in the voice or instrumental studios. A total of 12 credits may be earned, but no more than 3 in any one semester or term.

MUSP 231 - Jazz Combo (1 TO 4)
Players of appropriate instruments are organized into small groups according to proficiency for the study of commercial and jazz music. These groups may include trios, quartets, quintets, and sextets. Prerequisite: permission of the director of jazz studies. A total of 20 credits may be earned, but no more than 4 in any one semester or term.

MUSP 251 - Jazz Styles (2)
Studies and analyzes jazz solos from specific genres, such as Early Jazz, Bebop, Cool etc., utilizing the art of transcription. The course is hands-on and each student must bring their instrument. Prerequisite: MUST 250. Open only to music majors and minors.
MUSP 290 - Introduction to Conducting (2)
Principles of baton technique. Development of a fluent and expressive beat style and of rhythmic and aural faculties essential to successful direction of vocal and instrumental ensembles.

MUSP 300 - Orchestral Repertoire (1 TO 3)
The study and rehearsal of orchestral literature specific to the student's primary applied instrument. Prerequisite: permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MUSP 306 - Piano Accompanying (1 TO 3)
One lesson each week is devoted to practice and coaching on the materials of accompaniment as performed during a specified three-hour period each week in the voice or instrumental studios. A total of 12 credits may be earned, but no more than 3 in any one semester or term.

MUSP 325 - Secondary Study (Piano) (1)
One lesson (private or small class at the discretion of the instructor) in piano weekly. A total of 4 credits may be earned, but no more than 1 in any one semester or term.

MUSP 326 - Group Piano (1)
Introductory piano class for students with limited prior piano study. Fundamentals of keyboard and musicianship skills. A grade of C or better is required for credit towards a music degree. Prerequisite: permission of the director of the school. A total of 4 credits may be earned, but no more than 1 in any one semester or term.

MUSP 327 - Secondary Study (Organ/Harpsichord) (1)
One lesson (private or small class at the discretion of the instructor) in organ or harpsichord weekly. A total of 4 credits may be earned, but no more than 1 in any one semester or term.

MUSP 348 - Opera Workshop (1)
Fosters appreciation of and familiarity with operatic literature through public performance of excerpts from chamber and standard operas, either as a soloist or as a member of the opera chorus. Prerequisite: audition. A total of 8 credits may be earned, but no more than 1 in any one semester or term.

MUSP 360 - Popular Vocal Styles (1 TO 4)
Assists students in developing individual popular singing styles. Concentrates on all facets of performance including audience-performer rapport, the performer-accompanist relationship, and microphone techniques. A total of 4 credits may be earned.

MUSP 370 - Opera Productions (2 TO 6)
Study and public performance of standard operas of all periods. Combines the art forms of music, drama, stagecraft, and dance in the study of coaching, acting, and stage technique. Prerequisite: audition or previous experience. A total of 6 credits may be earned.

MUSP 377 - Service Playing and Church Music Administration (2)
Hymn playing and anthem accompaniments; formulation of adult and children's choirs in churches; congregational singing; service planning. Prerequisite: MUST 112; one year of organ study or permission of the instructor.

MUSP 390 - Instrumental Conducting and Rehearsal Techniques (2)
Score interpretation, rehearsal preparation, and teaching strategies in a laboratory setting. Practical experiences include warm-ups; tuning procedures; error detection; solving problems of balance, blend, and intonation; and performance practice. Prerequisite: two semesters of MUSE 390; MUSP 290; permission of the director of the school.

MUSP 391 - Choral Conducting and Rehearsal Techniques (2)
Score interpretation, rehearsal preparation, and teaching strategies in a laboratory setting. Practical experiences include warm-ups; error detection; solving problems of balance, blend, intonation; and performance practice. Prerequisite: two semesters of MUSE 391; MUSP 290; permission of the director of the school.

MUSP 397 - Junior Recital (1)
Taken during the junior year by students with a performance major. Students will present a full recital as approved by their area committees and director of the school. Prerequisite: permission of the School of Music. Open only to music majors.

MUSP 398 - Diction for Singers (2)
Beginning voice students will learn effective pronunciation of English and Italian using the International Phonetic Alphabet (IPA). Techniques in producing vowel sounds and consonant articulation unique to the sung work will be emphasized. A total of 4 credits may be earned, but no more than 2 in any one semester or term.
MUSP 400 - Major Study (1 TO 4)
One primary instrument/voice lesson per week for students majoring in guitar, organ, piano, symphonic instruments, or voice. Prerequisite: junior standing; permission of the director of the school. A total of 30 credits may be earned, but no more than 4 in any one semester or term.

MUSP 401 - Principal Study (1 TO 4)
One primary instrument/voice lesson per week for students majoring in music composition, music education, or music technology. Prerequisite: junior standing; permission of the director of the school. A total of 30 credits may be earned, but no more than 4 in any one semester or term.

MUSP 420 - Wind and Percussion Literature and Pedagogy (2)
Music and materials for wind and percussion instruction. Includes audition and recital preparation, repertoire, practice techniques, and internship experience. A total of 12 credits may be earned, but no more than 2 in any one semester or term. Open only to bachelor of music students with winds or percussion as their major instrument.

MUSP 423 - String and Harp Literature and Pedagogy (2)
Music and materials for stringed instruments and harp instruction. Includes audition and recital preparation, repertoire, practice techniques, and internship experience. A total of 12 credits may be earned, but no more than 2 in any one semester or term. Open only to bachelor of music students with strings or harp as their major instrument.

MUSP 424 - Advanced String and Harp Literature and Pedagogy (2)
Music and materials for stringed instruments and harp instruction. Includes advanced in-depth study of repertoire, audition and recital preparation, pedagogical methods, practice techniques, and preparing documents for publication. Prerequisite: MUSP 423 or permission of the instructor. A total of 12 credits may be earned, but no more than 2 in any one semester or term. Open only to bachelor of music students with strings as their major instrument.

MUSP 425 - Elementary Piano Pedagogy and Literature (3)
Methods and materials of elementary-level piano teaching, studio management, observation, and practice teaching of elementary-level students. Prerequisite: permission of the director of the school.

MUSP 426 - Intermediate Piano Pedagogy and Literature (3)
Methods and materials of intermediate-level piano teaching, observation, and practice teaching of undergraduate piano minors or other intermediate-level students.

MUSP 427 - Guitar Literature and Pedagogy (2)
Music and materials for guitar instruction. Includes audition and recital preparation, repertoire, practice techniques, and internship experience. Open only to bachelor of music students with guitar as their major instrument.

MUSP 429 - Vocal Pedagogy (2)
Materials for vocal instruction. Includes methods of teaching vocal techniques for practice and performance with emphasis on studio teaching and learning.

MUSP 430 - Small Ensemble (Woodwinds) (1 TO 4)
Players of woodwind instruments are organized into small groups according to proficiency for the study of music of all periods with emphasis on chamber music style of playing. A total of 24 credits may be earned, but no more than 4 in any one semester or term.

MUSP 431 - Small Ensemble (Brass) (1 TO 4)
Players of brass instruments are organized into small groups for the study and performance of brass ensemble literature. These groups may include trios and quartets of like instruments, or quintets, sextets, and octets of mixed brasses. A total of 24 credits may be earned, but no more than 4 in any one semester or term.

MUSP 432 - Small Ensemble (Percussion) (1 TO 4)
Players of percussion instruments are organized into small groups for the study and performance of the literature designed for their public performance. These groups may range in size from trios and quintets to larger ensembles. A total of 24 credits may be earned, but no more than 4 in any one semester or term.

MUSP 433 - Small Ensemble (Strings) (1 TO 4)
Players of string instruments are organized into small groups according to proficiency for the study of music of all periods with emphasis on chamber music style of playing. A total of 24 credits may be earned, but no more than 4 in any one semester or term.

MUSP 434 - Small Ensemble (Harp) (1 TO 4)
Groups of harpists are organized to perform the specialized literature for this unusual ensemble. Original compositions
and transcriptions are presented in public performances. A total of 24 credits may be earned, but no more than 4 in any one semester or term.

MUSP 435 - Small Ensemble (Piano) (1 TO 2)
Study of sonata literature in conjunction with another instrument or literature for multiple pianos. Students will be organized into small groups according to proficiency and demands of the literature. Prerequisite: permission of the director of the school. A total of 24 credits may be earned, but no more than 2 in any one semester or term.

MUSP 436 - Ensemble for New Music (1 TO 2)
Players of all instruments are organized into small groups for the study of contemporary chamber music. A total of 24 credits may be earned, but no more than 2 in any one semester or term. Open to all students with sufficient proficiency.

MUSP 437 - Small Ensemble (Organ and Church Music) (1 TO 2)
Performance projects of interest to the organist and church musician. Reading of anthems, motets, oratorio movements; music for organ and instruments; music for graded church choirs; conducting from the keyboard. A total of 24 credits may be earned, but no more than 2 in any one semester or term.

MUSP 438 - Small Ensemble (Vocal) (1 TO 2)
Quartets, sextets, octets, and multiples of these units are arranged as student enrollment indicates. Music studied and performed ranges from the traditional quartet literature to material appropriate for glee clubs. A total of 24 credits may be earned, but no more than 2 in any one semester or term.

MUSP 439 - Small Ensemble (Guitar) (1 TO 2)
Guitar players are organized into small groups to study and perform the duet, trio, and quartet repertoire for classical guitar. Upperclass students generally study ensemble works involving other instrumentation such as guitar and flute; guitar and strings; and guitar and voice. Prerequisite: permission of the director of the school. A total of 24 credits may be earned, but no more than 2 in any one semester or term.

MUSP 440 - Vocal Diction and Literature (2)
Advanced study of diction in major western languages as it pertains to singing and applications in performance of music literature for singers. Prerequisite: MUSP 398 or permission of the instructor.

MUSP 456 - Jazz Improvisation 1 (2)
An introductory course in jazz improvisation focusing on chord/scale relationships, acquisition of basic melodic patterns in all keys, common harmonic progressions, swing rhythm and syncopation performance practice, and application of improvisatory concepts to the performance of blues, jazz standards, and basic modal compositions. Open only to music majors and minors.

MUSP 457 - Jazz Improvisation 2 (2)
Continued study of jazz improvisation focusing on modern jazz concepts. Topics to include altered extensions, use of melodic minor scale, symmetric scales, pentatonics, harmonic substitutions, playing "out" and performance of standard jazz repertoire from Bebop and Brazilian jazz to fusion and modern jazz. Prerequisite: MUSP 456. Open only to music majors and minors.

MUSP 462 - Jazz Piano Lab (1)
An introduction to jazz piano technique primarily for non-pianists, addressing seventh chord types in all keys, chord inversions, voice leading, comping, and basic homophonic performance of jazz standard repertoire from lead sheets. Open only to music majors and minors.

MUSP 477 - Continuo Playing and Keyboard Improvisation (1 TO 2)
Development of facility in reading from figured basses or improvisation in the church service, free harmonization of hymns. Prerequisite: MUST 212 or MUSP 377. A total of 2 credits may be earned.

MUSP 490 - Advanced Conducting (1 TO 3)
One one-hour weekly lesson in conducting. Private or small class at the discretion of the instructor. Prerequisite: MUSP 390 or 391. A total of 3 credits may be earned.

MUSP 493 - Workshop in Music Performance (1 TO 3)
A one- or two-week workshop on special topics in music performance. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

MUSP 495 - Entrepreneurship for Musicians: Seminar (2)
Provide students with an overview of employment opportunities available for musicians, and to help them gain the skills necessary to establish a career as professional musicians. Class time will be devoted to development of a personal portfolio of materials needed to apply for positions in music, and to improving presentation skills for auditions and interviews. Prerequisite: permission of the director of the school. A total of 4 credits may be
earned, but no more than 2 in any one semester or term. Open only to music students.

**MUSP 496 - Entrepreneurship for Musicians: Practicum (3)**
Extend requisite knowledge and skills developed in Career Seminar 1. Topics will include (but are not limited to): grant and proposal writing, marketing in the arts, basic media design (including recording and video techniques), and community outreach in the arts. Prerequisite: MUSP 495 and permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to music students.

**MUSP 497 - Entrepreneurship for Musicians: Capstone (3)**
Allows students to develop, engage, and experience real-world applications in music. This course is designed for students to use all of their acquired requisite skills from previous experiences and course work and put them into one final project. This project will be evaluated by a team of faculty members at the end of the semester. Prerequisite: MUSP 496 and permission of the director of the school. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to music students.

**MUSP 498 - Senior Recital (2)**
Taken during the senior year by students with a performance major. Students will present a full recital as approved by their area committees and the director of the school.

**MUSP 499 - Independent Study in Musical Performance (1 TO 4)**
An opportunity to cover specific needs or interests for which provisions are not made by the regular course offerings of the school. Prerequisite: permission of director of the school. A total of 4 credits may be earned.

**MUST - MUSIC: THEORY & COMP**

**MUST 100 - Fundamentals of Music Theory (3)**
The study of rudiments of written music theory, including notation, scales, key signatures, music terminology, intervals, rhythm and meter, chord construction, and music terminology.

**MUST 101 - Sight Singing and Ear Training (1)**
In-depth study and application of sight singing techniques, dictation, chord recognition, error detection, and related activities. Placement by level of experience. Recommended parallel: MUST 111.

**MUST 102 - Sight Singing and Ear Training (1)**
Continuation of MUST 101 including more advanced sight singing, dictation, chord recognition, error detection, and related activities. Prerequisite: grade of C or better in MUST 101.

**MUST 111 - Music Theory (2)**
In-depth study of music fundamentals including rhythm, melodic structure, four-part harmony, elementary harmonic and structural analysis accompanied by writing, listening, and score study. Placement by level of experience. Must be taken in sequence. Recommended parallel: MUST 101.

**MUST 112 - Music Theory (2)**
Continuation of MUST 111 including more advanced four-part writing, analysis, score study, and listening. Prerequisite: grade of C or better in MUST 111.

**MUST 121 - Introduction to Computer Music (3)**
An introductory course in computer music. Topics include digital audio, musique concrete, MIDI, digital audio workstations, audio synthesis and sampling. Creative projects and laboratory time mandatory. Open only to music majors.

**MUST 122 - Acoustics for Musicians (3)**
An introduction to physical acoustics and psychoacoustics, with an emphasis on music and audio applications. Topics include the physical properties of sound, wave mechanics, acoustic measurements, physical properties of instruments, tuning and temperament, and perceptual properties of sound.
MUST 212 - Music Theory (2)
Continuation of MUST 211, emphasizing practices of the later nineteenth century and the twentieth century. Mastery of basic understanding of post-romantic, impressionistic, expressionistic, neoclassical, serial, and other contemporary music required. Continued laboratory analysis. Prerequisite: grade of C or better in MUST 211.

MUST 221 - Music Composition 1 (2)
Study of music composition. Development of basic craftsmanship through the use of compositional exercises, notation study, and creation of short instrumental and vocal compositions. Prerequisite: MUST 101, 111, or permission of the instructor.

MUST 222 - Music Composition 2 (2)
Study of music composition. Development of basic craftsmanship through use of compositional exercises, notation study, and creation of short instrumental and vocal compositions. Prerequisite: MUST 221.

MUST 223 - Jazz Composition (2)
The compositional process is explored through detailed study of melody, theme and development, jazz harmony and reharmonization, and rhythmic principles, using classic jazz compositions from all periods as models. These fundamental elements are then applied to lead sheet writing and short forms. Topics to include blues, jazz song form (AABA), modal jazz compositions, romantic melody (ballad) writing, original forms, and use of pentatonics. Prerequisite: MUST 101 and 111 or permission of the instructor.

MUST 241 - Computer Music 1 (3)
Intermediate applications in computer music synthesis, processing, and programming focusing on expanding technical and creative control of computer music parameters, and extending knowledge of synthesis and audio processing techniques. Laboratory time is mandatory. Prerequisite: C or better grade in MUST 122 or MMP 125; or permission of the instructor.

MUST 250 - Jazz Theory (2)
An introductory course in jazz theory covering chord symbol nomenclature, chord scale theory, seventh chords and their extensions, modes of the major scale and melodic minor scale, standard harmonic progressions, song forms, voice leading, reharmonization, tritone substitutions, and more. Prerequisite: MUST 102 and 112. Open only to music majors and minors.

MUST 311 - Music Theory: Form and Analysis (2)
An in-depth study of large forms through intensive analysis, listening, research, and writing. Emphasizes individual student work completed outside class to develop abilities in theoretical and composition investigation. Prerequisite: grade of C or better in MUST 202 and 212. Open only to music majors.

MUST 312 - Music Theory: Eighteenth-Century Counterpoint (2)
In-depth study of eighteenth-century counterpoint that develops skills in analyzing and composing canons, inventions, and fugues. Prerequisite: MUST 311. Open only to music majors.

MUST 321 - Composition (2)
Private study. Development of basic craft through the writing of shorter instrumental and vocal compositions. Prerequisite: MUST 202, 212, 222.

MUST 322 - Composition (2)
Continuation of MUST 321. Prerequisite: MUST 321.

MUST 341 - Creative Practices in Sonic Arts Technology (2)
Survey of the development of creative practices using electronic and digital devices. Topics include the study of electronic and digital instruments; the analysis of sonic art compositions, performances and interactivity; and the aesthetics of sonic art and experimental music. Prerequisite: MUST 121 or permission of the instructor.

MUST 342 - Computer Music 2 (3)
Continuation of MUST 241. Topics focus on computer programming for MIDI, audio, and video, resulting in creative projects involving student-developed virtual instruments, digital synthesis and processing. Creative projects and laboratory time are mandatory. Prerequisite: MUST 241 or permission of the instructor.

MUST 350 - Computer Composition 1 (2)
Composition using the computer for the generation and/or control of music. Presents compositional techniques involving computer processing of sound, virtual instruments, and computer control. Prerequisite: MUST 241 or permission of the instructor.

MUST 410 - Choral Arranging (2)
Scoring for choir and choral ensembles. Gives particular attention to voicing, soloistic treatment of voices, texts, and other elements of traditional and contemporary
scoring. Prerequisite: MUST 311 or permission of instructor.

**MUST 411 - Instrumentation and Orchestration (2)**
Instruments and their uses in orchestral practice. Develops creative writing concepts through orchestration. Principles of solo and combination writing are presented through analysis. Projects in solo and ensemble writing are required. Prerequisite: MUST 202, 212.

**MUST 412 - Compositional Practices of the Seventeenth and Eighteenth Centuries (2 TO 3)**
Studies embracing general trends with focus (to be announced) on one or more composers, major works, or special developments of the period. Prerequisite: MUST 311 (waived for sacred music concentration B minors). A total of 3 credits may be earned.

**MUST 413 - Band Arranging (2)**
Scoring for symphonic band, wind ensemble, and other related groups. Emphasizes instrumentation, transposition, voicing, doubling, soloistic treatment, and scoring from piano or similar reduction. Prerequisite: MUST 311 or permission of the instructor.

**MUST 414 - Jazz Arranging (2)**
Arranging for jazz ensembles and related groups. Topics include the study of instrumentation, transposition, orchestration, and harmonic/melodic techniques. Prerequisite: MUST 311; or MUST 212 for composition majors; or permission of the instructor. Open only to music majors and minors.

**MUST 415 - Jazz Arranging 2 (2)**
Continuation of MUST 414. The large jazz ensemble is covered along with writing for strings in a jazz setting. Different ways to create diverse textures as well as harmonic considerations are explored. The final project is an arrangement that is considered for a performance on the Spring concert. Prerequisite: MUST 414. Open only to music majors and minors.

**MUST 416 - Theory of Nineteenth-Century Music (3)**
Vocabulary, devices, tonal organization, and shaping forces that characterize the compositional practices of nineteenth-century romanticism. Prerequisite: MUST 311 (MUST 212 for composition majors); permission of the instructor.

**MUST 417 - Theory of Twentieth-Century Music and Twenty-First-Century Music (3)**
Vocabulary, devices, tonal organization, notation, and other elements that characterize the compositional practices of twentieth and twenty-first-centuries. Prerequisite: MUST 311 or permission of the instructor.

**MUST 420 - Sixteenth-Century Counterpoint (3)**
Exercises in contrapuntal writing designed to develop sensitivity to sixteenth-century polyphonic practice. Prerequisite: MUST 311 (MUST 212 for composition majors); permission of the instructor.

**MUST 421 - Analytical Technique (3)**
The development of techniques for the identification and analysis of significant compositional elements as determined by the musical context. Prerequisite: MUST 312 (MUST 311 for composition majors); permission of the instructor.

**MUST 431 - Composition (2)**
Private study. Continuation of MUST 322 and the writing of larger, longer works. Prerequisite: MUST 322.

**MUST 432 - Composition (2)**
Continuation of MUST 431. Prerequisite: MUST 431. A total of 24 credits may be earned, but no more than 2 in any one semester or term.

**MUST 443 - Advanced Topics in Computer Music (3)**
An advanced seminar in computer music. Topics vary, focusing on advanced topics of computer music synthesis, composition, interactivity, and software design. Projects may involve research, creative output, or software development. Prerequisite: MUST 342 or permission of the instructor.

**MUST 444 - Human-Computer Interface Design (3)**
Exploration of practices and techniques of human-computer interface design and implementation in musical, visual, and intermedia arts. Projects will focus on the development of human control systems for real-time artistic output. Studio laboratory time required.

**MUST 445 - Music Perception (3)**
An advanced seminar in psychoacoustics and psychophysics. Topics may include the ear as a frequency analyzer, the auditory pathway, auditory perception, and special problems in the perception of music and musical structures. Prerequisite: MUST 241 or permission of the instructor.

**MUST 450 - Computer Music Composition 2 (2)**
Advanced composition using computer means. A continuation of MUST 350. Prerequisite: MUST 350 or
permission of the instructor. A total of 24 credits may be earned, but no more than 2 in any one semester or term.

**MUST 491 - Independent Study in Music Theory (1 TO 3)**
Study of a theoretical topic using readings, analysis, and research. Prerequisite: permission of the area chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**MUST 492 - Special Topics (2)**
Discussions, analysis, and projects concerning advanced theoretical problems from all periods and styles. Specific topics to be announced one semester in advance. Prerequisite: permission of the area chairperson. A total of 8 credits may be earned, but no more than 2 in any one semester or term.

**MUST 493 - Workshop in Music Theory and Composition (1 TO 3)**
A one- or two-week workshop on special topics in music theory and composition. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**MUST 495 - Composition-Project Recital (1 TO 3)**
Senior composition recital preparation, performance, and conducting preparation of senior recital of acoustic, electronic, and electroacoustic compositions. Recital is minimum one hour in duration and a balanced representation of the student's composition output. Ensemble performance and/or conducting is required. Prerequisite: permission of the area chairperson. A total of 3 credits may be earned.

**NEWS - NEWS**

**NEWS 105 - Journalistic Storytelling: Introduction (3)**
Introduction to journalistic storytelling, including writing, editing, and design. Emphasis on practical application of basic skills needed in multimedia newsrooms. Open only to students majoring in journalism or telecommunications.

**NEWS 108 - Foundations of Journalism: Great Stories and Storytellers (1)**
Introduction to the role of journalism in the United States with emphasis on the coverage of significant events and contributions of journalists who helped shape history and the profession. Open only to students majoring in journalism or telecommunications.

**NEWS 109 - Foundations of Journalism: Ethical and Legal Principles (1)**
Introduction to legal and ethical issues facing today's journalism professional. Overview of basic tenets, including the First Amendment, libel, privacy, and intellectual property. Prerequisite: JOUR 101.

**NEWS 120 - Newsgathering: Sourcing (2)**
Methods for identifying primary, secondary, and tertiary sources, and evaluating their credibility. Includes strategies for preparing and conducting interviews with an emphasis on critical-thinking skills needed to select, evaluate, synthesize, organize, and present information. Prerequisite: JOUR 101 and NEWS 105 for students majoring in journalism or telecommunications news concentration; TCOM 101 and NEWS 105 for students majoring in telecommunications digital sports production concentration.

**NEWS 121 - Newsgathering: Interviewing (1)**
Strategies for preparing and conducting interviews. Emphasis on effective questioning techniques, note taking, and the development of listening skills through in-class and field assignments. Prerequisite: successful completion of a departmental language usage proficiency exam; JOUR 101 and NEWS 105 for students majoring in journalism or telecommunications news concentration; TCOM 101 and NEWS 105 for students majoring in telecommunications digital sports production concentration.

**NEWS 122 - Journalistic Storytelling: Covering Events (1)**
Exploration of storytelling across multiple platforms. Preparation of stories using the inverted pyramid, sound bites, video, and online layering. Emphasis on news conferences, speeches, and sport events. Prerequisite: successful completion of a departmental language usage proficiency exam; JOUR 101 and NEWS 105 for students majoring in journalism or telecommunications news concentration; TCOM 101 and NEWS 105 for students majoring in telecommunications digital sports production concentration.

**NEWS 130 - Multimedia: Design (1)**
Introduction to basic multimedia design principles, visual communication theory and practice, typography, color, layout presentation, and design history. Emphasis on relationship between design and storytelling. Open only to students in a journalism department program and students in the telecommunications news concentration.
NEWS 131 - Multimedia: Stills (1)
Introduction to still photography and its relationship to the multimedia storytelling process. Includes acquisition, selection and editing of photographs; composition and lighting; history, ethics, and legal principles. Open only to students in a journalism department program and students in the telecommunications news concentration.

NEWS 132 - Multimedia: Audio (1)
Introduction to the role of sound in the multimedia storytelling process. Includes acquisition, selection, and editing of sound; proper recording techniques; ethical and legal principles. Open only to students in a journalism department program and students in the telecommunications news concentration.

NEWS 133 - Multimedia: Video (1)
Introduction to the role of moving pictures in the multimedia storytelling process. Includes acquisition, selection, and editing of video; proper recording techniques and professional standards; ethical and legal principles. Open only to students in a journalism department program and students in the telecommunications news concentration.

NEWS 197 - Introduction to Student Media (1)
Introduction to news-oriented student media at Ball State University including the missions, audiences, and process of each student media organization. Includes experience in journalistic storytelling for student media. Prerequisite: NEWS 105.

NEWS 215 - News Editing (2)
Theory and practice in editing across media platforms with emphasis on the role of editors, content planning and direction; story development and organization; presentation techniques to maximize audience impact; and proper language usage. Prerequisite: JOUR 101 and NEWS 105. Open only to students majoring in journalism or telecommunications.

NEWS 221 - Journalistic Storytelling: Covering Issues (3)
Developing issue-based news stories from idea to final presentation using traditional and emerging media technologies. Emphasis on topics related to the community, government, and the courts. Prerequisite: NEWS 120 and 133 or permission of the journalism department chairperson. Open only to students in a journalism department program and students in the telecommunications news concentration.

NEWS 229 - Multimedia: Production (3)
The use of video, stills, and graphics as elements of journalistic storytelling. Includes shooting and editing video and photos, creating photo galleries and audio slideshows. Prerequisite: NEWS 130, 131, 132, 133. Not open to journalism majors or telecommunications majors or minors.

NEWS 233 - Specialized Story Form Strategy (3)
Development of interactive content for web, online and mobile delivery using specialized storytelling tools. Emphasis on the use of social media for news acquisition and distribution, and on data journalism. Prerequisite: NEWS 105 and sophomore standing. Open only to students in a journalism department program and students in the telecommunications news concentration.

NEWS 240 - Current Issues 1 (1)
Exploration and discussion of current events and issues of international, national, state, local, and campus importance, with emphasis on how these events are covered to make them both meaningful and interesting. Prerequisite: JOUR 101.

NEWS 270 - Audience Analysis: Communities (1)
Exploration of the relationship between news organizations and the communities they serve with emphasis on how to produce content that reflects cultural, ethnic, racial and gender diversity. Prerequisite: JOUR 101 and NEWS 105.

NEWS 340 - Current Issues 2 (1)
Exploration of current events, with an emphasis on their importance and context. Prerequisite: NEWS 240.

NEWS 370 - Media Analytics (1)
Introduction to media analytics with an emphasis on using data to understand audience behavior, improve content, maximize revenue and achieve organizational goals. Prerequisite: junior standing.

NEWS 397 - Immersion: Special Topics (3)
Participation in a project-based immersive experience designed to enhance racial, socio-economic, gender, or cultural awareness. Extensive preparation and presentation of a significant multimedia project. Prerequisite: permission of the department chairperson. A total of 9 credits may be earned, but no more than 3 in any one semester or term.
NEWS 409 - Foundations of Journalism: Ethical and Legal Issues (2)
The relationship between the government and the American news media, with particular emphasis on contemporary legal and ethical issues. Prerequisite: NEWS 109; junior standing.

NEWS 418 - Specialty Reporting (2 TO 6)
Development of reporting and writing skills needed to communicate the complexities of topics such as science, environment, business, or education to diverse media audiences. Topic of course will be announced in advance of each offering. Prerequisite: JOUR 104 or NEWS 221 or SPTA 345. A total of 6 credits may be earned.

NEWS 449 - Legal and Ethical Issues (3)
Examination of ethical and legal issues facing journalists, including libel, intellectual property, privacy, and freedom of expression with an emphasis on emerging media journalism. Prerequisite: NEWS 109 or JOUR 234 or JOUR 235 or JOUR 250 or JOUR 261 or JOUR 280.

NREM - NATURAL RES & ENV MG
NREM 101 - Environment and Society (3)
Study of human roles in conservation resource management, environmental quality, and sustainable development. Effects of population and technology on environmental systems including air, energy, minerals, soil, water, vegetation, and wildlife. Environmental ethics, outdoor recreation, and public lands management are also covered. Laboratory and field activities.

NREM 201 - Undergraduate Seminar (1)
Career and internship planning, resume development, overview of natural resource and environmental management, orientation to community environmental resources. Emphasizes professional development of NREM majors. Includes field trip and other activities outside of the classroom. Prerequisite: NREM 101 or equivalent. Open only to NREM majors; others by permission of the department chairperson.

NREM 203 - Decision Making in Natural Resource Management (3)
Application of decision-making principles to natural resource management. Instruction in the use of basic microeconomic principles (investment, capital recovery, property rights, opportunity costs, discounting, compounding, prices) in practical resource management situations within the constraints of environmental laws and regulations. Uses simple algebraic and graphical tools.

NREM 204 - American Environmental History (3)
Designed to give students knowledge of use of resources in the United States by treating, in historical perspective, government policies and private enterprise practices of exploitation and conservation from settlement to the present. Emphasizes the way use of resources has shaped society. Not open to students who have credit in HIST 204.

NREM 205 - International Natural Resources: Development and Conservation (3)
An analysis of problems occurring as a result of development and use of natural resources worldwide. The role of resource management and conservation to enhance the carrying capacity of the earth. A case-study approach to the management of global environmental problems.

NREM 211 - Water Resources (3)
Hydrologic cycle and climate as a basis for water resources distribution and management. U.S. and international water resources issues: U.S. water allocation laws, national and international water conflicts, water quality, drinking water and wastewater treatment, surface and ground water hydrology, municipal water resources development. Includes laboratory and field work. Prerequisite: MATH 108 or 111 or 112 or 132 or 161 or 165 or appropriate math placement score and permission of the instructor.

NREM 221 - Soil Resources (3)
Soil as an integral part of our resource base and its relationship to other natural resources: its origin, development, and classification. The physical, chemical, and biological properties, with emphasis on the practical applications of soil science to natural resources planning. Includes laboratory and field work. Prerequisite: CHEM 111; MATH 108 or 111 or 112 or 132 or 161 or 165 or appropriate math placement score and permission of the instructor.

NREM 241 - Air Resources (3)
Survey of atmospheric characteristics and processes as they influence management of natural resources. Current air pollution issues; regulatory requirements and practices. Laboratory and field experiences. Prerequisite: CHEM 111; MATH 108 or 111 or 112 or 132 or 161 or 165 or appropriate math placement score and permission of the instructor.

NREM 286 - Computer and Quantitative Applications (3)
Work with various computer tools and data analysis packages as applied to topics in resource management. Requires basic understanding of computer operation. Prerequisite: MATH 108 or 111 or 112 or 125 or 132 or
161 or 165 or appropriate math placement score and permission of the instructor. Open only to NREM majors; others by permission of the department chairperson.

NREM 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

NREM 304 - Sustainable Agriculture (3)
Natural resource use in agricultural systems with emphasis on principles of sustainability. Includes integrated pest management, permaculture, and other production practices that conserve soil, water, and biological resources. Field trips included.

NREM 307 - Environmental Management in Developing Countries (3)
Survey of challenges facing management of urban environments and the rural-urban interface in the developing nations of Asia, Africa, Latin America, and Pacific Oceania. Features interdisciplinary approach with frequent guest speakers to discuss existing and potential management, economic, technical, and policy solutions in their regional, cultural, and historic contexts.

NREM 309 - Human Dimensions of Global Change (3)
Systematic exploration of major topics of human and environmental change from local to global scales, including: population, energy, agriculture, industry, technology, urbanization, water, climate, natural hazards, socioeconomic systems, land use, trade, marginalized societies, and biodiversity. Prerequisite: junior standing; or permission of the instructor.

NREM 320 - Wetland Characterization (3)
Study of wetland functions and values. Delineation of wetland boundaries according to the U.S. Army Corps of Engineers criteria (wetland hydrology, hydric soils, hydrophytic vegetation). Includes a substantial component of field work. Prerequisite: NREM 221; permission of the department chairperson.

NREM 324 - Soil Classification and Interpretation (3)
Includes soil genesis, morphology, classification, and survey. Stresses the relationship between soil information and the land-use decision-making process with practical applications provided. Considerable emphasis is placed on field study of soils and their uses. Prerequisite: NREM 221 or permission of the department chairperson.

NREM 331 - Energy and Mineral Resources: Issues and Choices (3)
Appraisal of the problems, prospects, and societal and technical issues surrounding the use of energy and mineral resources. Emphasizes environmental problems and ecoenergetics, consideration of the natural resource base, distribution and production problems, conservation, alternative energy systems, resource policy, and research.

NREM 335 - Renewable Energy and Sustainable Technology (3)
Exploration of alternative/renewable energy systems (wind, solar, hydro, biomass, geothermal, fuel cells). Case studies of sustainable technology emphasize topics including industrial ecology (life-cycle analysis, design for the environment, clean manufacturing, and impact assessment) and appropriate technology applications in developing countries. Problem-solving applications using various approaches.

NREM 346 - Indoor Environmental Quality (3)
Focuses on air quality in residential and nonresidential indoor environments; contaminants; health effects; sick buildings; diagnosis and measurement; mitigation measures. Lab and field experiences.

NREM 347 - Occupational/Industrial Hygiene (3)
Introduces the principles of assessing and controlling exposures to workplace hazards. Topics include occupational disease; exposure to contaminant gases, dusts, radiation, noise, and biological agents; ergonomic concerns; regulatory requirements; engineering control; and personal protection equipment.

NREM 357 - International Community Development (3)
Application of practical methods to problems of development in poor rural agrarian communities and environmental management in poor urban communities in Asia, Africa, and Latin America. Emphasizes face-to-face methodologies to the identification and development of workable solutions to resource and environmental problems of disadvantaged populations in developing nations.

NREM 369 - Professional Practice/Experiential Learning (1 TO 3)
Professional or other experiential learning experiences in environmental/natural resource management, studies, or education. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.
NREM 371 - Outdoor Recreation and Society (3)
The role of outdoor recreation in modern society. Perspectives ranging from local to global. Examination of the history of outdoor recreation in the United States to the present day, with emphasis on issues in both public and private sectors. May require one weekend field trip in addition to regular laboratory periods.

NREM 372 - Applied Research Methods in Resource Management (3)
Social science applications in natural resource and environmental management. These applications include quantitative and qualitative survey research designs, analysis of social data, and applications of survey results to political processes. Perspectives range from local to international.

NREM 385 - Wastewater Management (3)
Effects of wastewater on receiving waters, need for wastewater treatment, principles of wastewater treatment technologies: onsite, centralized, conventional and alternative treatment technologies; management and regulatory strategies. Includes field trip(s). Prerequisite: NREM 211 or permission of the department chairperson.

NREM 390 - Honors Colloquium in Natural Resources (1 TO 3)
Exploration of selected issues in natural resources, with emphasis upon individual projects, study, and discussion. A total of 3 credits may be earned. Open only to honors students; others with permission of the department chairperson.

NREM 392 - Environmental Interpretation (3)
Develops skills and techniques necessary to the interpretation of ecological and environmental characteristics of earth systems. Emphasizes field work and creative presentation of concepts, and organization and management of interpretive programs including sites and facilities. Prerequisite: NREM 101 or its equivalent; junior standing.

NREM 395 - Teaching Environmental Education (3)
Opportunities for enriching instruction through environmental education in formal and non-formal educational settings. Studies conservation, outdoor and environmental education, including teaching techniques and instructional resources used in each. Prerequisite: NREM 101 or permission of the department chairperson.

NREM 401 - Forest Planning and Stewardship (3)
Introduces students to the social, economic, and ecological forces that shape U.S. private forests. Takes an in-depth look at forest landowner values, attitudes, and perceptions of forests and linkages to management decision-making strategies and behaviors. Also introduces students to the skills they will need to interact with private forest landowners (PFLs) and forest management professionals. Students will develop forest stewardship plans based on interactions with PFLs on their property and information from forest professionals. Prerequisite: NREM 101, 211, and 221 or permission of instructor or department chairperson.

NREM 402 - Field Study (1 TO 6)
Off-campus field studies of a specific geographic area with emphasis on resource management. Details of arrangements (including group travel plans and housing) will be provided by instructor. A maximum of 3 credits applies to the NREM major. Prerequisite: NREM 101 or its equivalent; permission of the department chairperson. A total of 6 credits may be earned.

NREM 405 - Integrated Resource Management (3)
Systems perspective on holistic or integrated planning and management of natural resources. Stresses data analysis and its role in the decision-making process. Prerequisite: NREM 101 or equivalent; all core courses in natural resources and environmental management (or concurrent enrollment); junior or senior standing.

NREM 415 - Water Quality Management (3)
Effects, consequences of point and non-point sources of pollution on quality of surface and drinking water; occurrence, sources and effects of regulated and unregulated contaminants; role of regulations in water quality management in U.S., centralized drinking water and wastewater treatment. Laboratory analysis of water quality parameters; may include field work. Prerequisite: NREM 211 or permission of the department chairperson.

NREM 422 - Soil Quality (3)
Chemical, physical, and biological properties of soil that affect plant production and other land uses. Emphasizes nutrient cycles in natural and cropped systems. Use and fate of pesticides. Land application of agricultural and urban wastes. Prerequisite: NREM 221 or its equivalent; CHEM 111 or its equivalent or permission of the department chairperson.

NREM 427 - Soil Conservation and Management (3)
Stresses principles and methods of control of soil erosion using basic soil concepts. Studies management systems and individual practices with special emphasis on soil resource maintenance. Prerequisite: NREM 221 or permission of the department chairperson.
NREM 442 - Air Quality Management (3)
Basic technical and regulatory requirements of air quality management to plan and guide a successful air quality program at the facility level. Compliance, emission inventories and processes, meteorology and dispersion modeling, and permitting. Prerequisite: NREM 241.

NREM 473 - Outdoor Recreation Planning and Administration (3)
Application of basic principles and procedures for the planning and administration of resource-based and activity-based recreation areas. May require one weekend field trip as well as in-class field trips. Prerequisite: NREM 371 or permission of the department chairperson.

NREM 477 - Wilderness and Society (3)
Defining wilderness, understanding its unique significance, and analyzing techniques of past and present management. Includes study of research in perception and use. Weekend trip to the Deam Wilderness--Hoosier National Forest or a state forest back country area. Prerequisite: junior standing.

NREM 487 - Solid and Hazardous Waste Management (3)
Delineation of solid and hazardous waste management in the United States. Waste reduction, recycling, processing, and disposal methods are discussed. Technical, political, and economic aspects of waste management. Effects of improper disposal on environmental quality. Prerequisite: junior standing or permission of the department chairperson.

NREM 488 - Site Assessment and Remediation (3)
Experience with Phase I and Phase II environmental site assessments. Conventional and innovative technologies for remediation of contaminated soils and groundwater. Review of relevant environmental regulations. Some environmental chemistry. Open only to juniors or seniors.

NREM 490 - Community Engagement in Natural Resources and Environmental Management (3)
Professional experience with a client whose needs are matched by the NREM faculty. Each experience is unique and determined by the nature of the client-professor relationship. Prerequisite: NREM 101 or equivalent; junior or senior standing. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

NREM 491 - Environmental Readings (1 TO 3)
Individual or small-group discussions relevant to natural resources or environmental studies/sciences/management.

Prerequisite: NREM 101 or equivalent. A total of 3 credits may be earned.

NREM 497 - Special Studies in Environmental and Natural Resource Sciences (1 TO 3)
Opportunity to pursue special studies interests in environmental and natural resource sciences. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.

NSE - NATIONAL STUDENT EX
NSE 399 - National Student Exchange (12 TO 17)
For participants in the National Student Exchange program and for registration purposes only. Requires contact with department offices to obtain evaluation of course(s) before registration, if credit is to be applied to anything other than general electives. Replaced by evaluated credit once transcripts from exchange institutions are received. Prerequisite: permission of the dean of University College. A total of 17 credits may be earned.

NUR - NURSING
NUR 101 - Terminology for Health Care Professionals and Consumers (2)
Vocabulary used in nursing and related health fields. Includes terms related to diagnostic tests and pharmacology. Implications for use in communication and education of health care consumers. Core Transfer Library: Professional/Occupational (IPO 1820)

NUR 102 - Diabetes Education for Health Care Consumers (2)
Describes the types of diabetes, causes, complications, and management modalities for health care consumers.

NUR 103 - Health Behavior: Cultural Variations (3)
Examines culturally based health beliefs and values, preventive and therapeutic health practices and caring behaviors in diverse cultural and ethnic groups in the United States. Classroom and experiential activities address cultural assessment, awareness, and competence.

NUR 201 - Complementary and Alternative Health Modalities (2)
Focuses on an introduction to complementary and alternative modalities through essential concepts of holistic healing including the philosophical basis and information about various healing modalities for society at large.

NUR 228 - Introduction to Nursing (3)
Introduces professional nursing concepts including caring, role development as care provider, critical thinking and the
nursing process, communication, legal and ethical issues, culture and human diversity, health care systems, information and technology in health care. Prerequisite: ANAT 201; BIO 113; CHEM 101; PSYS 100; SOC 100; all of these courses must have a grade of C or better; permission of the director of the school. Prerequisite or parallel: PHYS 215. Open only to prenursing students.

NUR 230 - Health Appraisal Across the Lifespan (4)
Begins application of nursing process and professional role development using a holistic approach with emphasis on assessment. Focuses on psychomotor skills, data collection and interpretation, communication and interviewing skills, and beginning health promotion activities with clients across the lifespan in a variety of settings. Prerequisite: ANAT 201; BIO 113; CHEM 101; NUR 228; PHYS 215; PSYS 100; SOC 100; all of these courses must have a grade of C or better; permission of the director of the school. Open only to nursing students.

NUR 231 - Fundamental Nursing Skills (4)
Introduces scope of professional role development by focusing on selected psychomotor skills in the nursing care of clients in a variety of settings. Prerequisite: ANAT 201; BIO 113; CHEM 101; NUR 228; PHYS 215; PSYS 100; SOC 100; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 230. Open only to nursing students.

NUR 234 - LPN Transition to Baccalaureate Nursing (5)
Enhances application of nursing process using a holistic approach emphasizing assessment. Integrates previous knowledge and skills in building psychomotor skills, data collection and interpretation, and communication and interviewing skills with clients across the lifespan in a variety of settings. Prerequisite: ANAT 201; BIO 113; CHEM 101; COMM 210; EDPS 270, 355; NUTR 340; PHYS 215; SOC 100; all of these courses must have a grade of C or better; permission of the director of the school. Open only to nursing majors entering baccalaureate nursing program.

NUR 299X - Experimental/Developmental Topics (1 TO 6)
Topics relevant to the discipline. Course titles to be announced before each semester. A total of 6 credits may be earned.

NUR 300 - Environmental Contexts in Health Care (3)
Multidimensional aspects of health based on ecological, economic, and ethical issues. Environment related to internal and external dimensions (psychological, social, cultural, spiritual, physical) of health. Environment and health care in individual, family, and community at local, national, and international levels. Prerequisite: junior or senior standing or departmental permission.

NUR 301 - Sexual Health: Significance for Nursing (2)
Information about nursing assessments and interventions that will help clients and families cope with sexual problems related to a variety of stressors. Prerequisite: ANAT 201; BIO 113; CHEM 101; NUR 228; PHYS 215; PSYS 100; SOC 100; all of these courses must have a grade of C or better; permission of the director of the school. Prerequisite or parallel: NUR 230. Open only to nursing students.

NUR 302 - Nursing Foundations and Issues (3)
Examines the role of the professional nurse: provider of care, designer/manager/coordinator of care, and member of profession. Expands knowledge of nursing as related to information/health care technologies, ethics, global health care, health care systems, policy, research, human diversity, and theory. Prerequisite: ANAT 201; BIO 113; CHEM 101; COMM 210; EDPS 270, 355; NUTR 340; PHYS 215; SOC 100; all of these courses must have a grade of C or better; permission of the director of the school. Open only to nursing majors with RN licenses.

NUR 303 - Health Assessment (3)
Enhances skills in performing total health assessment of diverse clients across the lifespan. Learning experiences include selected case studies and performance of health assessments in a variety of health care settings. Additional fees may apply. Prerequisite or parallel: NUR 302 with a grade of C or better; permission of the director of the school. Open only to nursing majors with RN licenses.

NUR 304 - Health Policy: Issues and Impact (3)

NUR 307 - Gerontological Nursing (3)
Introduces nursing approaches aimed at managing unique needs of the elderly with best care practices. Normal and pathological changes, common disease processes, cultural diversity, psychological function, nutrition, pain, pharmacology, abuse, dying, legal and ethical concerns are among topics included. Prerequisite: NUR 230 with a grade of C or better; permission of the director of the school. Open only to nursing students and registered nurses.
NUR 314 - Nursing Statistics (3)
Focus is on understanding the basic statistical analysis methods, their application, computation, and interpretations. Linking statistical analysis procedures to research will be emphasized. Learn how and why to select specific statistical methods and then interpret the results. Prerequisite: departmental permission. Open only to baccalaureate nursing students and registered nurses.

NUR 320 - Pharmacotherapeutics (2)
Applies the problem-solving process to the nurse's role in administering medication using nursing knowledge from previous science and nursing courses. Prerequisite: NUR 230.

NUR 322 - Research in Nursing (3)
Develops skills to be a consumer of nursing research. Applies research findings for improved nursing practice, and explores ethical aspects of research. Provides a foundation for graduate research. Prerequisite: NUR 230, 231 (NUR 302 for RNs only); all of these courses must have a grade of C or better; permission of the director of the school. Parallel: PSYS 241 or SOC 382 or NUR 314. Open only to nursing students and registered nurses.

NUR 330 - Adult Health 1: Nursing Care Across the Adult Lifespan (4)
Focuses on health promotion, disease prevention, risk reduction, and nursing care of adults with acute/chronic/disabling conditions across the lifespan. Includes emphasis on critical thinking, communication, diversity, and professional role development. Learning experiences occur in classroom, laboratory, hospital, and community settings. Additional fees may apply. Prerequisite: COMM 210; EDPS 270; FCFN 340; HSC 180; NUR 230, 231; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 350; PSYS 241 or SOC 382 or NUR 314. Open only to nursing students.

NUR 340 - Adult Health 2: Nursing Care Across the Adult Lifespan (4)
Focuses on health promotion, disease prevention, risk reduction, and nursing care of adults with acute/chronic/disabling conditions across the lifespan. Includes emphasis on critical thinking, communication, diversity, and professional role development. Learning experiences occur in classroom, laboratory, hospital, and community settings. Additional fees may apply. Prerequisite: NUR 330, 350; statistics; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 322, 370. Open only to nursing students.

NUR 350 - Psychiatric-Mental Health Nursing (4)
Focuses on the role development of the professional nurse who provides care to clients experiencing behavioral and psychological problems in a variety of psychiatric settings. Emphasizes health promotion, holistic assessment, therapeutic communication, environmental (milieu) management and psychiatric illness management. Additional fees may apply. Prerequisite: COMM 210; EDPS 270; FCFN 340; HSC 180; NUR 230, 231; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 330; PSYS 241 or SOC 382 or NUR 314. Open only to nursing students.

NUR 351 - Operating Room Nursing (2)
Concepts and theories of the professional nurse's role in the operating room setting. Provides selected experiences for application to clinical nursing. Additional fees may apply. Prerequisite: NUR 330.

NUR 352 - Oncology Nursing (2)
Provides knowledge about cancer pathology, prevention, advances in therapy, cancer research, and skills needed to care for cancer clients. Reviews computer and video technologies used in client care. Discusses psychosocial concepts related to care of clients and caregivers. Additional fees may apply. Prerequisite: NUR 340; departmental permission.

NUR 370 - Pediatrics (4)
Applies professional role as provider, designer, manager, and coordinator of care with families and the pediatric population in a variety of settings. Applies strategies for health promotion, risk reduction, and disease prevention with diverse populations. Additional fees may apply. Prerequisite: NUR 330, 350; statistics; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 322, 340. Open only to nursing students.

NUR 375 - Economic Issues of Nursing (2)
Introduces basic concepts of economics in relation to nursing practice. Content will include the current and future economic issues facing the health care industry, especially those affecting nursing practice.

NUR 401 - Applied Nursing Concepts (4)
Synthesizes professional role with individuals and families across the lifespan experiencing acute, chronic, disabling, and multisystem crisis in a variety of settings. Synthesizes concepts of illness and disease management, health promotion, information and health care technologies, policies, theory, ethics, human diversity, and research.
Additional fees may apply. Prerequisite: NUR 302, 303; all of these courses must have a grade of C or better; permission of the director of the school. Open only to registered nurses.

NUR 402 - Adult Health 3 (4)
Expands focus on health promotion, disease prevention, risk reduction, and nursing care of adults with acute/chronic/disabling conditions across the lifespan. Includes emphasis on critical thinking, communication, diversity, and further professional role development. Learning experiences in classroom, laboratory, hospital, and community settings. Additional fees may apply. Prerequisite: NUR 322, 340, 370; NUR 314 or PSYS 241 or SOC 382; WPP 392 or 393 or 394; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 404, 406. Open only to nursing students.

NUR 404 - Community Health (4)
Applies nursing process with individuals, families, and aggregates across the lifespan in various community settings. Uses concepts of public health, nursing, health promotion, risk reduction, disease prevention, epidemiology, information/health care technologies, human diversity, research, and health care systems/policies emphasizing collaborative practice and use of community resources. Prerequisite: HSC 180; NUR 322, 340, 370; NUR 314 or PSYS 241 or SOC 382; WPP 392, 393, 394; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 402, 406. Open only to nursing students and registered nurses.

NUR 405 - Management and Leadership (3)
Evaluates the professional nurse's role as a care designer, coordinator and manager. Emphasizes traditional management functions such as planning, organizing, staffing, directing, collaborating, delegating, and evaluating. Additional fees may apply. Prerequisite: NUR 302 with a grade of C or better; permission of the director of the school. Open only to registered nurses.

NUR 406 - Nursing of Childbearing Families (4)
Applies professional role as provider, designer, manager, and coordinator of care with women and childbearing families in a variety of settings. Applies strategies for health promotion, risk reduction, and disease prevention with diverse childbearing families. Prerequisite: NUR 322, 340, 370; NUR 314 or PSYS 241 or SOC 382; WPP 392 or 393 or 394; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 402, 404. Open only to nursing students.

NUR 423 - Seminar: Transition to Practice (2)
Examines trends in nursing and health care: historical, legal, political, and ethical perspectives. Includes assessments and practice opportunities for NCLEX-RN. Additional fees may apply. Prerequisite: NUR 402, 404, 406; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 425, 430. Open only to nursing students.

NUR 425 - Leadership and Management (4)
Applies leadership and management principles to nursing and health care systems. Emphasizes communication, negotiation, delegation, coordination, and evaluation skills. Outcome-based practice and interdisciplinary teamwork are utilized in diverse clinical settings. Additional fees may apply. Prerequisite: NUR 402, 404, 406; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 423, 430. Open only to nursing students.

NUR 426 - Health Assessment (2)
Enhancement of skills in performing total physical assessment with clients of diverse ages. Learning experiences include lecture, demonstration, and practice in clinical laboratory. Prerequisite: departmental permission.

NUR 430 - Adult Health 4 (4)
Synthesizes concepts of health promotion, disease prevention, risk reduction, and nursing care of adults with multisystem crises. Emphasizes critical thinking, communication, diversity, and professional role development in a variety of settings. Additional fees may apply. Prerequisite: NUR 402, 404, 406; all of these courses must have a grade of C or better; permission of the director of the school. Parallel: NUR 423, 425. Open only to nursing students.

NUR 456 - Issues in Health, Illness and Aging (3)
Focuses on issues in health as a multidimensional experience for older adults. Includes the topics illness management, ethical decision making, health care delivery systems, wellness, disease prevention, family caregiving, economic perspectives, and cultural concerns. Emphasizes application of information by consumers and health care professionals, specifically nurses. Open to all students.

NUR 499 - Independent Study (1 TO 4)
Designed for students who want to pursue independent study in nursing under the direction of a faculty advisor. Prerequisite: departmental permission. A total of 4 credits may be earned.
NUTR - NUTRITION

NUTR 101 - Introduction to Dietetics (1)
Topics dealing with the profession of dietetics; roles and responsibilities of dietetic practitioners; professional standards and code of ethics; legislative issues related to health care; career and continuing education opportunities; marketing of dietetic services; and current trends and issues. Open only to pre-dietetics and dietetics majors.

NUTR 240 - Nutrition for Educators (3)
General principles of nutrition as related to growth, development, and health of the infant, child, adolescent, and adult. Focus on integration of nutrition education strategies and classroom application. Not open to students who have credit in NUTR 275 or 340. Open only to majors in: elementary education, family and child, and health and physical education; minors in FCS.

NUTR 275 - Personal Nutrition (3)
Emphasizes the principles of nutrition and their application to daily living. The relationship between diet and health, the role of nutrition in reducing individual health risk, and contemporary issues in nutrition will be discussed. Core Transfer Library: Health and Physical Education (IHP 1402) Not open to students who have credit in NUTR 240 or 340.

NUTR 300 - Field Study in Nutrition and Dietetics (3 TO 6)
This course explores 21st century global nutritional issues including both over and under nutrition, food insecurity, religious dietary prohibitions and national and international food system paradigms. Food and nutrition policies that shape population and individual dietary consumption patterns both nationally and globally are researched and debated for immediate and downstream impacts. Prerequisite: permission of the Nutrition and Dietetic Program Director if used for Nutrition and Dietetic program credit, or Nutrition and Health Science chairperson. A total of 6 credits may be earned. Open to all students.

NUTR 340 - Principles of Human Nutrition (3)
Addresses the principles of nutrition, life cycle nutrition, and the relationship of diet to health and disease. Prerequisite or parallel: CHEM 100 or 101 or 111 or permission of the department chairperson. Not open to students who have credit in NUTR 240 or 275 or by permission of the department chairperson.

NUTR 345 - Macronutrients (3)
Introduces metabolic pathways, cellular metabolism, and various energy systems of the human body. Emphasizes the digestion, metabolism, transport, and excretion of macronutrients. Prerequisite: CHEM 360 and NUTR 340 and PHYS 215. Open only to those admitted to the dietetics major.

NUTR 346 - Micronutrients and Phytochemicals (3)
Emphasizes the roles of micronutrients in the human body, introduces micronutrient functions in a healthy population and response in times of deficiency. Discusses the role of micronutrients and other food constituents in the prevention of chronic illness. Prerequisite: CHEM 360 and NUTR 340 and PHYS 215. Open only to those admitted into the dietetics major.

NUTR 350 - Technology of Food Science (3)
Scientific evaluation of the behavior of food and its qualitative and quantitative properties. Overview of the food industry, food technology, biotechnology, and federal regulations related to food supply. Review of research and marketing practices of bioengineered food and dietary supplements. Prerequisite: HOSP 220. Open only to students admitted into the dietetics program.

NUTR 360 - Nutrition and Cardiometabolic Disease (3)
This course will provide a study of the links between nutrition, metabolism, and cardiometabolic conditions including diabetes, obesity, and cardiovascular disease. Prerequisite: NUTR 340 or permission of the department chairperson.

NUTR 363 - Administration of Food and Nutrition Systems (3)
A systems approach to foodservice management theories, concepts, and functions for integrated health care, public institutions, and nutrition care operations. Emphasizes the operational functions of purchasing, production, and administration of food and nutrition services.

NUTR 365 - Professional Leadership in Nutrition and Dietetics (3)
This course builds upon leadership and management theories to develop the fundamental concepts and skills necessary to emerge as a leader in the dietetics profession. Theories, critiques and analysis of leadership are explored in the context of evidence-based dietetics practice. Open only to students admitted into the dietetics program.

NUTR 375 - Nutrition Assessment, Counseling, and Education (3)
An introduction to nutrition assessment techniques, principles of nutrition counseling, and appropriate nutrition interventions utilized in the Nutrition Care Process. Motivational interviewing, behavior change theories, and
effective nutrition counseling strategies are emphasized. 
Prerequisite: NUTR 340. Open only to students admitted into the dietetics major.

NUTR 396 - Nutrition Counseling Practicum (3)
Individual counseling methods; behavior change theories; basic dietary, biochemical, and anthropometric assessment; and multi-culture customs and food practices. Application of theory and counseling skills in various community settings focusing on student's areas of interest. Thirty hours in-class; thirty hours supervised practicum. On-site experiences supervised and evaluated by a registered dietitian. Prerequisite: NUTR 345 or permission of the department chairperson.

NUTR 411 - Seminar in Nutrition and Dietetics (3)
Exploration of evidence-based and specialized practice in nutrition and dietetics. Course may include advance practice points, examination of policy and scope of practice, or critical evaluation of current trends within the dietetics profession or practice. Discussions on specific topics of current interest in nutrition and dietetics. Prerequisite: permission of the department chairperson.

NUTR 425 - Nutrition Counseling Practicum (3)
Application of theory and counseling skills in various community settings focusing on primary areas of dietetics practice (clinical, community, and foodservice administration). Includes 90 hours of supervised practicum. On-site experiences are supervised and evaluated by a Registered Dietitian Nutritionist (RDN). Prerequisite: NUTR 360 and 375. Open only to students accepted into the dietetics major.

NUTR 435 - Introduction to Research in Nutrition and Dietetics (3)
This foundation course introduces nutrition and dietetics students to fundamentals of research, including study design, methods and data collection, analysis and interpretation. Quantitative and qualitative study designs and ethical issues in conducting research will be emphasized. Through the use of evidence-based guidelines, systematic reviews and scientific literature from the nutrition and dietetics literature, students will build skills for conducting research and evaluation. Prerequisite: PSYS 241. Open only to students admitted to the dietetics program.

NUTR 444 - Sports Nutrition and Weight Control (3)
A study of the unique nutrition needs of athletes' physically active populations. Presents the scientific basis for sports nutrition emphasizing concepts such as energy intake and timing, calorie expenditure and balance, and nutrition strategies to improve athletic performance and body composition. Prerequisite: NUTR 340.

NUTR 445 - Advanced Nutrition (3)
Emphasizes the use and metabolism of nutrients at the cellular level in the human body. Significance and interpretation of current research in the field of nutrition is discussed. Prerequisite: CHEM 360; NUTR 340; senior standing. Prerequisite or parallel: ACC 201.

NUTR 446 - Medical Nutrition Therapy 1 (3)
An introduction to the principles of medical nutrition therapy. Provides a comprehensive review of disease pathophysiology and treatment with a focus on evidence-based nutritional care using the Nutrition Care Process. Preparatory for success in clinical practice settings, including supervised practice programs. Prerequisite: NUTR 360 or permission of the department chairperson. Open only to students admitted into the dietetics program.

NUTR 447 - Medical Nutrition Therapy 2 (3)
Explores the application of evidence-based medical nutrition therapy for the prevention and management of multiple medical conditions and disease states. An emphasis is placed on nutrition assessment, diagnosis, intervention, monitoring and evaluation of chronic diseases and critically ill patients. Prerequisite: NUTR 446 or permission of the department chairperson. Open only to students admitted into the dietetics program.

NUTR 448 - Nutrition and Weight Management (3)
A study of the etiology, pathophysiology, and interdisciplinary intervention of overweight and obesity. An emphasis will be placed on nutrition as a treatment modality, and the role of nutrition research in guiding public policy. Prerequisite: NUTR 340.

NUTR 455 - Lifecycle Nutrition (3)
Involves the study of special nutritional needs, physiology, and health concerns of pregnant and lactating women, infants, children, adolescents, women of child bearing age, and older adults. Prerequisite: NUTR 340. Open only to students admitted into the dietetics major or by permission of the department chair.

NUTR 456 - Community Nutrition (3)
Overview of community nutrition and nutrition education. Analysis of biological, economic, social, cultural, and policy issue affecting a community's nutritional status. Emphasis on federal food and nutrition programs and policy implications at the state and local level. Observation and participation in local nutrition programs. Prerequisite: NUTR 455.
NUTR 480 - Global Nutrition (3)
This course explores 21st century global nutritional issues including both over and under nutrition, food insecurity, religious dietary prohibitions and national and international food system paradigms. Food and nutrition policies that shape population and individual dietary consumption patterns both nationally and globally are researched and debated for immediate and downstream impacts. Prerequisite or parallel: NUTR 340.

PEP - PHYS ED: PROFESSNAL

PEP 158 - Teaching Dance and Gymnastics (2)
Introduction to teaching dance and gymnastics for the physical educator. Provides physical education teaching majors a developmentally appropriate scope and sequence for teaching dance (K-12) in today's schools. Also provides comprehensive skill instruction for teaching gymnastics in a safe environment. Prerequisite: permission of the coordinator. Open only to health and physical education teacher education majors.

PEP 161 - Foundations and Principles of Health and Physical Education (3)
Introduction to the field of health and physical education and the health and physical education teaching major to include development of portfolios. Field experience required. Prerequisite: permission of the coordinator. Open only to health and physical education teacher education majors.

PEP 205 - Introduction to Sport in American Life (3)
A thorough examination of the various historical, sociological, and psychological aspects of sports in our society. Not sport-appreciation oriented, but rather an examination of what occurs to both competitors and spectators as they become involved with a sport activity. Open to all undergraduate students. Not open to students who have credit in HIST 205.

PEP 209 - Introduction to Teaching Physical Education (3)
Introduction to content development, teaching styles, and assessment within the areas of games and rhythms primarily in the elementary school curriculum. Field experience required. Prerequisite: PEP 161; permission of the coordinator. Open only to health and physical education teacher education majors and elementary education wellness concentration program students.

PEP 222 - Teaching Field and Court Invasion Games (2)
Focuses on skill development and teaching methodology for selected field and court invasion games (e.g., soccer, basketball, team handball, flag football, floor hockey). Includes laboratory experience. Prerequisite: permission of the coordinator. Open only to health and physical education teacher education majors and elementary education majors.

PEP 226 - Disability Sport (1)
Provides a working knowledge of the official sports organizations recognized by the United States Olympic Committee. Emphasizes classifications, organizational structure, sporting events, and coaching athletes with disabilities.

PEP 227 - Introduction to Adapted Physical Education/Activity (3)
Introductory knowledge of disabilities with emphasis on referral, placement, and programming in physical education and physical activity; relevant federal and state laws that pertain to the education and physical education of students with disabilities; and activity programming across the lifespan. Students are required to participate in field experiences. Open only to health and physical education majors, coaching minors or by permission of the coordinator.

PEP 232 - Teaching Net and Wall Games (2)
Focuses on skill development and teaching methodology for selected net and wall games (e.g., tennis, badminton, pickleball, volleyball). Includes laboratory experience. Prerequisite: permission of the coordinator. Open only to health and physical education teacher education majors and elementary education majors.

PEP 252 - Teaching Physical Fitness and Fitness Activities (3)
Introduction to major fitness technology, training principles, youth fitness and appropriate fitness instruction/assessment in a physical education (K-12) setting for the physical educator. Includes laboratory experience. Prerequisite: permission of the coordinator. Open only to health and physical education teacher education majors and elementary education majors.

PEP 288 - Practicum in Adaptive Physical Education 1: Survey/Introduction (1)
Provides an overview of practicum opportunities both on and off campus related to working with students with disabilities in a physical education/exercise setting. Will
rotate approximately every five weeks across three practicum settings.

**PEP 291 - Motor Development and Learning Across the Lifespan (3)**
Introduction to motor development and motor learning across the lifespan emphasizing major theoretical viewpoints; factors affecting motor development including physiological change, perceptual change, cognitive change, sociocultural practices, and intervention; and instruction and assessment of fundamental motor patterns in a laboratory setting. Includes laboratory experience. Prerequisite: PEP 161; permission of the coordinator. Open only to health and physical education teacher education majors and coaching minors.

**PEP 310 - Formal Assessment in Health, Physical Education, and Physical Activity Settings (3)**
Measurement and evaluation in health, physical education, and physical activity settings. Focus will be put on utilizing formal assessments to establish appropriate learning objectives for students with and without disabilities through the assessment process. Experience in administration of motor and fitness assessments will occur. Includes laboratory experience. Prerequisite: PEP 161 and 209; meet decision point 2 requirements; or by permission of the coordinator. Open only to health and physical education teacher education majors.

**PEP 326 - Adapted Water Exercise (1)**
Concerned with methodologies used in water exercise for persons with disabilities. Important for aquatics instructors, rehabilitation personnel, pre-physical therapy, adapted physical education, exercise science, and athletic training. Concentrates on practical application. Prerequisite: AQUA 315 or permission of the instructor.

**PEP 327 - Assessment for Adapted Physical Education/Activity (3)**
Focus will be on establishing appropriate service for students with disabilities in physical education or physical activity through the assessment process. Experience in administration of motor and/or fitness assessments will occur. Students will be required to develop a detailed IEP, or long range fitness plan, assessment report, and programming recommendations. Students are required to participate in field experiences. Prerequisite: PEP 227; physical education teacher education majors must meet decision point 2 requirements; permission of the coordinator. Open only to health and physical education and special education majors.

**PEP 328 - Practicum in Adaptive Physical Education 2: Educational (1)**
Focuses on an educational setting (community-based schools). Requires fulfilling a sixteen-week practicum assignment under the supervision of an adapted physical educator. Involvement with lesson plans, program development, and evaluation. Prerequisite: PEP 288.

**PEP 394 - Teaching Physical Education in the Elementary School (3)**
Focuses on planning, teaching, and evaluating a developmental physical education program for elementary school students. Field experience required. Prerequisite: PEP 161 and 209; health and physical education teacher education majors must meet decision point 2 requirements; or by permission of the coordinator. Open only to health and physical education teacher education majors and elementary education and wellness concentration students.

**PEP 399 - Teaching Physical Education in the High School (3)**
Designed to develop understanding in the ability to plan, implement, and evaluate a variety of teaching strategies to be used in establishing a positive learning environment for high school students. Includes a 20-hour practicum in a high school. Prerequisite: PEP 161, 209, and 394; meet decision point 2 requirements; or by permission of the coordinator. Open only to health and physical education teacher education majors.

**PEP 400 - Introduction to Curriculum Design in Physical Education (2)**
Introduction to curriculum and curriculum design covering all facets of physical education in the K-12 setting. Prerequisite: PEP 161, 209, and 394; health and physical education teacher education students must meet decision point 2 requirements; or by permission of the coordinator. Open only to health and physical education teacher education majors and elementary education majors.

**PEP 403 - Seminar in Adapted Physical Education (2)**
Designed to permit APE licensure students to consider current issues and topics in adapted physical education and activity. Prerequisite: permission of the department chairperson.

**PEP 444 - Developing the Health and Physical Education Classroom Environment (3)**
Focus will be on developing a classroom environment that cultivates optimal learning. This will include strategies in the areas of discipline, organization, management, engagement, and other needs in today's health and physical education classrooms. Prerequisite: PEP 161, 209, and
394; meet decision point 2 requirements; or by permission of the coordinator. Open only to health and physical education teacher education majors.

**PEP 471 - Mainstreaming and Inclusion in Physical Education (3)**
Designing physical education programs to meet the requirements of Public Law 101-476, IDEA, which requires that each child with disabilities have an individualized physical education program. Prerequisite: PEP 227 or SPCE 201.

**PEP 484 - Practicum in Adaptive Physical Education 3: Clinical (1)**
Focuses on a clinical emphasis in exercise and fitness for persons with disabilities. Requires a sixteen-week practicum assignment under the supervision of an adapted physical educator. Involves weight training, water exercise, and general fitness activity sessions for persons with disabilities. Prerequisite: PEP 227 or permission of the instructor.

**PEP 494 - Programming in Adapted Physical Education and Activity (3)**
Develop appropriate activities for students with disabilities in K-12 physical education and into adulthood through practical experience in educational and exercise environments. Students develop activities based on functional profile assessments, and provide appropriate modification and program delivery. Decision point 2 requirements apply to physical education students. Field experience participation required. Prerequisite: PEP 227 and 327 or permission of the instructor. Open only to health and physical education majors, special education majors or by permission of the instructor.

**PEF - PHYCL ED FIT WELLNSS**

**PEF 100 - Physical Conditioning (2)**
Designed to increase fitness through twice weekly activity sessions. These session focus on flexibility, muscular endurance/strength, and cardiorespiratory endurance. Students will learn how to safely and properly utilize the Student Recreation and Wellness Center Fitness Room and design an individualized resistance training program. Includes one hour of lecture weekly, containing a common core of knowledge concerning physical fitness and wellness. Not open to students who have credit in PFW 101, 102, 103, 104, 105, 117, 148, 160, 161, 162, 217.

**PEF 101 - Physical Fitness and Wellness Activity (1)**
Designed to develop physical fitness through twice weekly aerobic activity sessions. May select physical conditioning, walking, jogging, group fitness, aqua fitness, or swimming. Completes the PFW requirement for associate degree students. Prerequisite: permission of the PFW coordinator. Not open to students who have credit in PFW 100, 103, 104, 105, 117, 148, 160, 161, 162, 217. Open only to associate degree students or students who have received transfer credit.

**PEF 102 - Physical Fitness and Wellness Lecture (1)**
Includes one hour of lecture weekly containing a common core of knowledge concerning fitness and wellness. Completes the PFW two-credit requirement for associate degree students pursuing a baccalaureate degree. Prerequisite: PFW 101; permission of the PFW coordinator. Not open to students who have credit in PFW 100, 103, 104, 105, 117, 148, 160, 161, 162, 217. Open only to associate degree students or students who have received transfer credit.

**PEF 103 - Walking (2)**
Designed to develop physical fitness through twice weekly aerobic walking sessions. Includes one hour of lecture weekly containing a common core of knowledge concerning fitness and wellness. Not open to students who have credit in PFW 100, 101, 102, 104, 105, 117, 148, 160, 161, 162, 217.

**PEF 104 - Jogging (2)**
Designed to develop physical fitness through twice weekly jogging sessions. Includes one hour of lecture weekly containing a common core of knowledge concerning fitness and wellness. Not open to students who have credit in PFW 100, 101, 102, 103, 105, 117, 148, 160, 161, 162, 217.

**PEF 105 - Adapted Physical Fitness and Wellness (2)**
Designed to enable a student with an impairment or disability to complete the PFW requirement. Special adaptations in activities will be made to accommodate the student. Includes one hour of lecture weekly containing a common core of knowledge concerning physical fitness, health, and other related wellness topics. Lecture and all activity choices should be coordinated with the Program Coordinator of Physical Fitness and Wellness. Not open to students who have credit in PFW 100, 101, 102, 103, 104, 117, 148, 160, 161, 162, 217. Open only to students with disabilities.

**PEF 117 - Aqua Fitness (2)**
Designed to develop physical fitness through twice weekly water aerobics sessions. Ability to swim is not required. Includes one hour of lecture weekly containing a common core of knowledge concerning fitness and wellness. Not
open to students who have credit in PFW 100, 101, 102, 103, 104, 105, 148, 160, 161, 162, 217.

**PFW 148 - Group Fitness (2)**
Designed to develop physical fitness through twice weekly aerobic activity sessions. Includes one hour of lecture weekly containing a common core of knowledge concerning fitness and wellness. Not open to students who have credit in PFW 100, 101, 102, 103, 104, 105, 117, 160, 161, 162, 217.

**PFW 160 - Physical Fitness and Wellness (2)**
Limited to distance education students or students with special situations. Designed to provide both activity and lecture components of the Physical Fitness and Wellness course. Offered on-line only. Not open to students who have credit in PFW 100, 101, 102, 103, 104, 105, 117, 148, 161, 162, 217.

**PFW 161 - Physical Fitness and Wellness Activity (1)**
Limited to distance education students with special situations (e.g., completing Associate Degree, received transfer credit). It is designed to provide the activity component of the Physical Fitness and Wellness Course. Offered on-line only. Prerequisite: permission of the PFW coordinator. Not open to students who have credit in PFW 100, 101, 102, 103, 104, 105, 117, 148, 160, 162, and 217.

**PFW 162 - Physical Fitness and Wellness Lecture (1)**
Limited to distance education students, students with special situations (e.g., received transfer credit, military credit). It is designed to provide the lecture component of the Physical Fitness and Wellness Course. Offered on-line only. Prerequisite: permission of the PFW coordinator. Not open to students who have credit in PFW 100, 101, 102, 103, 104, 105, 117, 148, 160, 161, and 217.

**PFW 217 - Swimming (2)**
Designed to develop physical fitness through twice weekly endurance (lap) swimming sessions. Includes one hour of lecture weekly containing a common core of knowledge concerning fitness and wellness. Prerequisite: ability to swim at the intermediate level is required and successful completion of an entry-level skill test. Not open to students who have credit in PFW 100, 101, 102, 103, 104, 105, 117, 148, 160, 161, 162.

**PHIL - PHILOSOPHY**

**PHIL 100 - Introduction to Philosophy (3)**
An introduction to such important philosophical problems as the existence of God, whether ethical values are subjective, and the extent of our freedom. These topics and others may be approached by examining the ideas of great philosophers or current thinkers. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1050)

**PHIL 102 - Introduction to Techniques of Critical Reasoning (3)**
Introduction to basic techniques of critical reasoning in deductive and inductive logic, and strategies for decision making and problem solving.

**PHIL 200 - Symbolic Logic (3)**
Logic is the study of reasoning. Introduction to the theory of deductive reasoning, including propositional logic (the logic of "and", "or", "not", and "if...then") and predicate logic (the logic of "all", "some", and "none"). Students will learn how to clarify an argument by translating it into a symbolic language, and how to evaluate an argument for validity. These skills are applicable to any discipline, and excellent for students looking to improve their reasoning skills in preparation for law school or entrance exams for any professional school.

**PHIL 202 - Ethics (3)**
A discussion of some of the central problems in ethics such as the justification of ethical beliefs, theories of right and wrong, and the conditions of moral responsibility, as well as a discussion of current moral issues. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1051)

**PHIL 203 - Social Philosophy (3)**
Involves a discussion and clarification of such basic social concepts as liberty, justice, and equality, as well as a critical discussion of such normative issues as how liberty should be distributed and how justice can be maximized.

**PHIL 210 - Philosophy of Religion (3)**
Critical analysis of such selected topics as the nature and existence of God, the problem of evil, the justification of religious belief, and the significance of religious experience. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1052)

**PHIL 215 - Philosophy of Race (3)**
An introduction to various discourses about race. Topics may include the philosophical analysis of the nature of race, the relationship between race and personal identity, racial justice, and portrayals of race in media.

**PHIL 230 - Environmental Ethics (3)**
Introduction to and analysis of basic concepts, principles, theories, and issues in environmental ethics.
PHIL 235 - Bioethics (3)
An examination of ethical concepts and theories in biological sciences and health care fields. Topics may include distributive justice, autonomy, privacy, informed consent, research ethics, ethics and reproductive technologies, end of life decisions, and genetic ethics.

PHIL 240 - Society, Discipline, and Control (3)
A critical examination of the role of institutional control in contemporary society. Involves philosophical discussion of the impact of institutions such as schools, hospitals, public housing, prisons, and the media on individuals and groups. Also examines the relationships between discipline and control and race, class, gender, and sexuality.

PHIL 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

PHIL 300 - History of Ancient Philosophy (3)
The development of philosophical theories and ideas from the rise of philosophy in Greece through the medieval period. Emphasizes the theories in relation to one another, the times that produced them, and the thinkers who offered them.

PHIL 302 - History of Modern Philosophy (3)
The development of philosophical theories and ideas from the Renaissance to the nineteenth century. Emphasizes these theories in relation to one another, the times that produced them, and the thinkers who offered them.

PHIL 303 - American Philosophy (3)
A survey of American philosophy from colonization to the present with particular attention to pragmatism. Multicultural perspectives typically addressed.

PHIL 304 - Philosophy of Sport (3)
Inquiry into the nature of sport and analysis of its ethical, social, and aesthetic dimensions. Topics may include embodiment, competition, fair play, sports personship, violence, racial and gender equity, ergogenic aids, nonhuman animals in sports, sports on the college campus, and the broader relation of sport to society.

PHIL 306 - Contemporary Philosophy (3)
A critical examination of leading philosophers or movements since 1900. May emphasize contemporary (e.g. feminist, phenomenological) methodologies. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

PHIL 307 - Aesthetics (3)
Exploration of philosophical views on the nature, interpretation, and criticism of art. Readings and discussion may range from classical to contemporary thinkers and issues.

PHIL 310 - African Philosophy (3)
A critical examination of leading trends in African philosophy. Ethnophenomenology, philosophic sagacity, liberation philosophy, or modern/critical philosophy are possible topics.

PHIL 312 - Current Issues in Philosophy (3)
Selected current and important issues in philosophy. Topics may include social and ethical problems, recent work on traditional philosophical problems, and other issues of concern. A total of 9 credits may be earned, but no more than 3 in any one semester or term.

PHIL 320 - Emotions, Character, and Moral Responsibility (3)
Examine the nature of various morally significant human phenomena. Students explore the philosophical status of specific emotions, character traits, and the context in which they are expressed, criteria for moral responsibility, and the appropriate place for empirical research in philosophical discussions of ethics.

PHIL 369 - Internship (3)
Students undertake supervised internships related to their professional or career goals. Internships may be with educational or religious institutions, public or private agencies, or business firms. Prerequisite: permission of the department chairperson.

PHIL 370 - Existentialism (3)
An exploration of existentialism, the philosophical movement that takes as its starting point the lived experience of the human being. Topics may include responsibility, angst, authenticity, freedom, ambiguity, the "absurd," existence and essence, among others.

PHIL 380 - Justice (3)
An investigation of philosophical questions about justice. Topics may include: intergenerational justice; economic justice; justice within families; what justice demands on behalf of people who have been marginalized because of disability, sexual orientation, race, citizenship, gender, etc.; justice as a virtuous character trait; and activist strategies for creating justice.
PHIL 390 - Honors Colloquium in Philosophy (2)
Exploration of selected problems in philosophy with emphasis on individual study. Open only to students in the Honors College or by permission of the department chairperson.

PHIL 400 - Immersive or Experiential Learning (1 TO 6)
Immersive or experiential learning provides students with experiences that are integrative, collaborative, and reflective. Students will demonstrate the ability to communicate effectively both orally and in writing. Courses are designed to meet TIER 3 requirements. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

PHIL 403 - Reading and Special Study (1 TO 6)
Allows superior students opportunities for guided reading and investigation in areas of philosophy not covered intensively in available courses. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

PHIL 404 - Metaphysics (3)
A study of the principal problems of metaphysics including the nature of reality, the relation of mind and body, and the issues of freedom and determinism. Prerequisite: junior or senior standing or permission of the instructor.

PHIL 406 - Feminist Ethics and Epistemology (3)
Using the concepts, principles, theories, and issues in feminist ethics and epistemology to problematize norms of gender, sexuality, and other axes of privilege. Open only to juniors and seniors.

PHIL 410 - Epistemology (3)
A critical discussion of leading theories and problems, including skepticism, the structure of knowledge and justification, and challenges to traditional approaches. Epistemology satisfies the capstone requirement for the major. Prerequisite: junior or senior standing or permission of the instructor.

PHIL 415 - Topics in Neurophilosophy (3)
A variable content course. An exploration of mind, brain, and ethics, especially neuroethics. Examines issues both in and at the intersection of the philosophy of mind, brain science, and ethics. Highlights philosophical themes and problems and explores the possible relevance of the "neurorevolution" to them. Also explores ethical issues posed by applications of brain science. Consult departmental website for the specific topic in a given semester. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

PHIL 420 - Contemporary Ethical Theory and Problems (3)
A critical examination of recent ethical theories and their application to contemporary problems. Prerequisite: junior or senior standing or permission of the instructor.

PHYC - PHYSICS
PHYC 100 - Conceptual Physics (3)
Includes a survey of physics with conceptual emphasis on basic classical and modern concepts of matter, motion, energy, and forces with application to mechanics, heat, sound, electricity and magnetism, light, atomic, nuclear, and elementary particles. Core Transfer Library: Physical Sciences (IPS 1750)

PHYC 101 - Physical Science Concepts for Teachers (1 TO 3)
Principles and concepts of the laws of nature involving mechanical, heat, light, electrical, nuclear, and chemical energy and the conservation laws associated with these forms of energy. Emphasizes applications appropriate to the classroom. Designed primarily for students in elementary education programs. A total of 3 credits may be earned.

PHYC 102 - Preparation of Physical Science Teaching Materials (3)
Selected topics in physical science stressing the construction of models and experimentation appropriate to the classroom. Designed primarily for students in elementary education programs. Prerequisite: PHYC 101 or permission of the department chairperson. Open only to students in the teacher-education curriculum.

PHYC 110 - General Physics 1 (4)
Studies the laws of Newtonian mechanics. Introductory fluid statics and dynamics, heat and thermodynamics, and wave motion and sound. Recommended background: one year of college preparatory physics in high school. Core Transfer Library: Physical Sciences (IPS 1751)
Prerequisite: MATH 112, trigonometry or appropriate trigonometry sub scores on mathematics placement exam or passing grade in high school physics. Parallel: PHYC 111 is recommended for students who have not attained the recommended background.

PHYC 111 - Problem Solving in General Physics 1 (1)
Helps students master problem solving in physics. Work in small groups with the assistance of a professor who will
guide their work and teach them to analyze and set up problems on mechanics and thermodynamics. Intended to help students succeed in physics.

**PHYC 112 - General Physics 2 (4)**
Static and current electricity, magnetism, light and optics, and an introduction to modern physics including relativity and elements of atomic and nuclear physics. Core Transfer Library: Physical Sciences (IPS 1752) Prerequisite: PHYC 110.

**PHYC 115 - Career Issues in Physics, Applied Physics, and Engineering (1)**
Introduction to departmental, university, and professional resources essential for the successful completion of undergraduate programs and entry into related career paths. Seminars and campus field trips will provide information about resources related to academic success, experiential activities outside the classroom, and resume/portfolio development.

**PHYC 118 - Explorations in Physical Science and Engineering (2)**
Introduction to knowledge and skills essential for the successful completion of undergraduate programs in astronomy, physics, physics teaching, and pre-engineering preparation. Interactive lectures and laboratory investigations will provide experiences in designing, conducting, analyzing, and reporting scientific investigations; the engineering design process; the development and interpretation of scientific models; the mathematical skills necessary for success in physical science and engineering; the exploration of issues related to the nature of science; and opportunities for research within the department and future careers.

**PHYC 120 - General Physics 1 (5)**
First course in calculus-based physics for students in pre-engineering, the physical sciences, or mathematics. Topics include Newtonian mechanics, work and energy, motion, impulse and momentum, elasticity and wave motion, sound, and hydrostatics and hydrodynamics. Core Transfer Library: Physical Sciences (IPS 1753) Prerequisite or parallel: MATH 165. Not open to students who have credit in PHYC 120.

**PHYC 122 - General Physics 2 (5)**
Continuation of PHYC 120. Topics include heat and laws of thermodynamics, Coulomb’s law and the electric field, Ampere’s law and the magnetic field, introduction to Maxwell’s equation, DC and AC circuits; the nature, propagation, and properties of light; and lens systems. An optional introduction to selected topics in modern physics may be included. Core Transfer Library: Physical Sciences (IPS 1754) Prerequisite: PHYC 120. Parallel: MATH 166.

**PHYC 140 - General Physics 1 (Calculus-based) (4)**
First course in calculus-based physics. Topics include Newtonian mechanics, work and energy concepts, impulse and momentum, elasticity, wave motion and sound, hydrostatics and hydrodynamics. Course content is the same as the lecture portion of PHYC 120. Uses a computer-based content delivery system (internet, CD ROM, etc.) and is designed for students who prefer a self-paced individualized learning environment. Prerequisite or parallel: MATH 165. Not open to students who have credit in PHYC 120.

**PHYC 141 - General Physics 1 (Calculus-based) Lab (1)**
Laboratory component to accompany PHYC 140. Computer simulations and in-lab experiments are performed. Prerequisite or parallel: PHYC 140. Not open to students who have credit in PHYC 120.

**PHYC 142 - General Physics 1 Laboratory (4)**
Continuation of PHYC 140. Topics include heat and laws of thermodynamics, Coulomb’s Law and the electric field, Ampere’s law and the magnetic field, introduction to Maxwell’s equation. DC and AC circuits; the nature, propagation, and properties of light; and lens systems. An optional introduction to selected topics in modern physics may be included. Computer-based content delivery for self-paced learning. Prerequisite: PHYC 140 and MATH 166.

**PHYC 143 - General Physics 2 (Calculus-based) Lab (1)**
The laboratory component to accompany PHYC 142. Computer simulations and in-lab experiments are performed. Prerequisite or parallel: PHYC 142. Not open to students who have credit in PHYC 122.

**PHYC 151 - Energy: Technology and Society (3)**
An investigation of the sources, generation, transmission, storage, and uses of energy based on physical laws and processes, and an overview of the implications and consequences for society.

**PHYC 200 - Topics in Physics (1 TO 3)**
Discussion of specific topics in physics, such as lasers, holography, and solid-state electronics. Designed for students not majoring in physics, the course requires no math or science background. Students may consult their curricular advisors or the Department of Physics and
Astronomy for the specific topics being studied during a given semester. A total of 3 credits may be earned.

**PHYC 260 - Introduction to Modern Physics (4)**
Basic concepts, underlying principles, theories, and applications of modern physics. Some topics include special relativity, quantum physics, atomic structure and models, molecules, solids, nuclei, particles, statistical mechanics, astrophysics, and cosmology. Applications include lasers, scanning tunneling microscopes, semiconductor devices, and nanoelectronics. Prerequisite: PHYC 122.

**PHYC 262 - Modern Physics Laboratory (2)**
Classic experiments such as the Cavendish measurement of $G$, determination of Planck's Constant, Rutherford Scattering, Millikan Oil Drop Experiment, Franck-Hertz Experiment, and the Hall Effect will be performed. Use of computer software for report generation will be stressed. Prerequisite: PHYC 260.

**PHYC 330 - Mechanics (3)**
Basic concepts of mechanics, general motion of particles in three dimensions. Simple and damped harmonic motion. Particle dynamics in noninertial frames of reference, central forces. Dynamics of systems of particles. Motion of rigid bodies in three dimensions. Dynamics of oscillation systems. Prerequisite: PHYC 120 and MATH 166.

**PHYC 336 - Computational Physics (3)**
Introduction to computational methods in physics, with an emphasis on application and on developing tools for implementing realistic computer simulations and interpretation of the data. These topics will include numerical integration, function fitting and minimization, realistic simulation of projectile motion and many-body systems, stochastic mechanics, wave motion, and molecular dynamics. Prerequisite: PHYC 122 and MATH 166, some prior programming experience at level of CS 120 is preferred.

**PHYC 340 - Physical Optics (3)**
The electromagnetic wave theory of light, spectra, interference, diffraction, polarization, and double refraction. Prerequisite: PHYC 122.

**PHYC 346 - Acoustics (3)**
Elements of pure and applied acoustics. Topics include solutions to the wave equation, acoustic impedances, electro-mechanical-acoustic analogies, direct-radiator loudspeaker and enclosure theory, and a discussion of room acoustics. Prerequisite: PHYC 122.

**PHYC 354 - Electronics 1 (4)**
Introductory DC and AC circuit theory, semiconductor components, power supplies, transistor amplification; integrated circuit operational amplifiers, active filters, oscillators, and function generators. Basic combinational logic circuits and Boolean algebra. Emphasizes applications of integrated circuits. Prerequisite: PHYC 122 or permission of the department chairperson.

**PHYC 356 - Electronics 2 (4)**
Sequential logic circuits including scalars, displays, memories, shift registers, analog-to-digital and digital-to-analog conversion techniques. Microprocessor architecture and support electronics for microcomputer design. IC chips and circuits for experiment to microcomputer interfacing. Use of a microprocessor development system. Prerequisite: PHYC 354 or permission of the department chairperson.

**PHYC 360 - Introductory Nuclear Techniques (3)**
Emphasizes experimental studies of radioactive disintegrations and decay products and their relation to nuclear structure. Instrumentation in radioisotope measurements. Two lectures and two two-hour laboratory periods a week. Prerequisite: PHYC 260.

**PHYC 369 - Professional Experience (1 TO 3)**
Paid work and learning experience in applied or theoretical physics or astronomy in an institutional, industrial, or university research or development setting. May occur during one or more semesters. Prerequisite: approval of proposed program by the department chairperson. A total of 3 credits may be earned.

**PHYC 370 - Introductory Mathematical Physics 1 (3)**
Application of mathematical techniques to the formulation and solution of physical problems in classical mechanics, thermodynamics, and electromagnetic theory, and in quantum mechanics. Topics include computer algebra systems and applications. Prerequisite: PHYC 122, 260; or permission of the department chairperson.

**PHYC 372 - Introductory Mathematical Physics 2 (3)**
Techniques in the formulation and solution of physical problems. Computer algebra systems (e.g. Mathematica) may be introduced for the study of topics such as boundary value problems, transforms, special functions of mathematical physics, and applications of tensor analysis in physics. Prerequisite: PHYC 122, 260; or permission of the department chairperson.

**PHYC 380 - Seminar in Modern Physics (3)**
Seminar covering selected topics in contemporary physics. Extensive use of library facilities including current journals.
and periodicals in physics. Discussions of current research in physics and related fields. Prerequisite: permission of the instructor. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

**PHYC 390 - Honors Colloquium in Physics (1 TO 3)**
Exploration of selected topics in physics, with emphasis on individual projects, study, and discussion. A total of 3 credits may be earned. Open only to honors students or with permission of the department chairperson.

**PHYC 396 - The Teaching of Physics in the Secondary School (1 TO 3)**
Aims, nature of the subject matter, calculus concepts, and applications in the teaching of physics; amount and nature of laboratory work, standardized tests, and textbooks used in the teaching of physics. No regularly scheduled laboratory. Prerequisite: 16 credits in physics or permission of the department chairperson. A total of 3 credits may be earned.

**PHYC 434 - Thermal Physics (3)**
Classical and statistical thermodynamics. Basic concepts, principles, and theories of thermodynamics. Equations of state, laws of thermodynamics, introduction to the kinetic theory of gases, and classical and quantum statistics. Prerequisite: PHYC 260; PHYC 330; MATH 267 or permission of the department chairperson.

**PHYC 450 - Electricity and Magnetism 1 (3)**
Application of vector analysis to electrostatics, dielectric theory, magnetostatics, dipole and multipole fields, currents, and Maxwell's equations. Prerequisite: MATH 267; PHYC 122.

**PHYC 452 - Electricity and Magnetism 2 (3)**
The study of electric and magnetic fields in electrodynamics, Maxwell's equations, EM waves, radiation of moving charges, and relativistic kinematics and dynamics. Prerequisite: PHYC 450.

**PHYC 461 - Elementary Particles (3)**
Investigates the nature and behavior of elementary particles through the study of the symmetries and dynamics responsible for their production, reactions, and decays. Prerequisite: PHYC 464.

**PHYC 463 - Nuclear Physics (3)**
Nucleus and nuclear interactions. Emphasizes experimental facts about nuclear processes in discussions of particle accelerators, detectors, radioactivity (alpha, beta, and gamma decay), interaction of radiation with matter, nuclear reactions, nuclear structure, nuclear models, and nuclear applications in science and technology. Prerequisite: PHYC 260.

**PHYC 464 - Introduction to Quantum Mechanics (3)**
De Broglie's postulate, the uncertainty principle, the Schroedinger equation, the free particle, square well potentials, harmonic oscillator, the hydrogen atom, angular momentum and other selected wave mechanics problems. No regularly scheduled laboratory. Prerequisite: MATH 267; PHYC 260.

**PHYC 465 - Quantum Mechanics (3)**
Review of barrier problems, the harmonic oscillator, and angular momentum using matrix methods. Problems involving perturbation theory, one-electron atoms, magnetic moments, spin, relativistic effects, symmetric and anti-symmetric wave functions, the helium atom, transition rates, and scattering theory. Prerequisite: PHYC 464.

**PHYC 466 - Condensed Matter Physics (3)**
Structure and physical properties of matter in the solid state. Electrical and magnetic properties, and band theory of solids with special emphasis on semiconductors. Prerequisite: PHYC 260.

**PHYC 469 - Immersion Experiences Related to Physics and Astronomy (3)**
Student teams will design and complete a project related to physics and/or astronomy which creates a tangible outcome. Team activities will be multifunctional and multidisciplinary. Students must form a project team and prepare a project outline prior to requesting permission from the department chairperson to enroll for the course. Prerequisite: permission of the department chairperson.

**PHYC 479 - Practical Experience (1 TO 3)**
Unpaid work and learning experience in applied or theoretical physics or astronomy in an institutional, industrial, or university research or development setting. May occur during one or more semesters. Prerequisite: approval of a proposed program by the department chairperson. A total of 3 credits may be earned.

**PHYC 482 - Independent Studies in Physics (1 TO 3)**
Scientific investigations in physics on an individual basis, consisting of experimental or theoretical/computational work, reading, and development of research techniques and skills. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.

**PHYC 483 - Seminar in Physics (1 TO 2)**
Selected literature on current physics, astronomy, education, or other science research. Students will report
on departmental seminar series presentations and make presentations on selected research topics. A total of 2 credits may be earned.

PHYC 485 - Measures of Learning in Physics (1)
Integration of the fundamental principles underlying undergraduate physics education and related measures of learning. Emphasis is on developing familiarity with the contents of local and national exams in physics which are often reflected in graduate level qualifying exams. Emphasis will be focused on basic concepts in the context of problem solving. Prerequisite: PHYC 260, 330.

PHYS - PHYSIOLOGY

PHYS 205 - Fundamentals of Human Physiology (3)
Human physiology emphasizing major functions of each system. Intended for health science and health and physical education teaching majors, science teaching majors, and radiography majors. Includes use of animals or animal tissue. Prerequisite recommended: a course in biological science. Not open to nursing majors, respiratory therapy majors, or to students who have credit in PHYS 215.

PHYS 215 - Human Physiology (5)
Study of cell physiology and all human body systems. Body fluid balance, acid-base balance, and temperature regulation are also covered. Group experimentation with recording apparatus. Includes use of animals or animal tissue. Prerequisite: ANAT 201 and course in biology or permission of the department chairperson. Prerequisite recommended: a chemistry course.

PHYS 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

PHYS 411 - Endocrinology (3)
Endocrine functions in humans and mammals with special emphasis on mechanisms. Normal hormone regulation and pathophysiological principles. Laboratory experience with small-mammal surgery and endocrine testing. One three-hour laboratory period weekly. Prerequisite: ANAT 201; one year of general chemistry.

PHYS 413 - Renal Physiology (3)
A detailed study of the urinary system and excretory functions. Emphasizes human physiology but also includes comparative vertebrate systems. Laboratory study includes gross, microscopic anatomy, and small mammal surgery.

One three-hour laboratory a week. Prerequisite: one course each in chemistry, anatomy, and physiology or permission of the instructor.

PHYS 414 - Cardiovascular Physiology (3)
A study of the dynamics of the human cardiovascular system, stressing applications of basic physical principles and the operation of physical regulatory systems. Includes seminar-style discussion of recent literature. Prerequisite: one course in physiology and one course in physics.

PHYS 415 - Physiology of Aging (3)
Study of how physiological systems change with age and the mechanisms that are thought to cause these changes. Disorders and diseases of aging will also be covered. Prerequisite: one course each in chemistry and physiology or permission of the instructor.

PHYS 416 - Human Toxicology (3)
A survey of chemical, physical, zoological, and botanical toxicoses in human health. The implications and methodology of dealing with hazardous substances and poisons will be considered in detail. Prerequisite: BIO 111 or one semester of PHYS; CHEM 101 or 111 and 112; or permission of the instructor.

PHYS 420 - Neuroscience (3)
Introductory study of the organization and function of the nervous system. Emphasizes integration of the structure and function of the nervous system. Prerequisite: one year of chemistry; one year of biology or physiology.

PHYS 435 - Pathophysiology (3)
The physiologic pathology of selected disease processes and dysfunctions. The pathogenesis of certain derangements with broad applicability. Underlying chemical, biological, and physical mechanisms will be studied. Laboratory experience will include demonstrations, specimen study, and visitations. One three-hour laboratory period weekly. Prerequisite: a course in anatomy, physiology, and chemistry.

PHYS 485 - Research Techniques in Physiology (3)
Introduction to experimental design, laboratory techniques, and data analysis and interpretation in anatomy and physiology. Laboratory will include methods employing animal preparations, modern cellular/molecular techniques, and general histological procedures. Introduction to computer data acquisition and analysis. Prerequisite: one course in physiology or permission of the instructor. Prerequisite recommended: CHEM 360 or 463.
PHYS 490 - Special Studies in Physiology (1 TO 3)
Designed to give undergraduate physiology students who exhibit special aptitude and interest an opportunity to pursue special lines of scientific investigation on an individual basis. Experimental work, wide reading, and development of research techniques or skills. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

PLAN - PLANNING

PLAN 100 - Introduction to Urban Planning and Development (2)
An introduction to urban planning and development. Open to all students.

PLAN 101 - Introduction to Planning (3)
Introduces students to the planning skills needed to help influence the direction and growth of communities and to help neighborhoods, cities, and rural areas strike a balance between development, the provision of essential services, and environmental protection. Offered on-line only to high school students. Not open to students who have credit in PLAN 100.

PLAN 202 - Site Planning and Design Studio (4)
Site analysis and design principles for small-scale projects, including building complexes, subdivisions, and neighborhood development. Present and defend designs for specific site locations. Prerequisite: CAP first year core program.

PLAN 203 - Regional Analysis and Design Studio (4)
Land analysis and planning at regional scale. Training to inventory social and physical elements on a regional scale, analyze the suitability of land and the vulnerability of the environment for development, and locate urban functions. Introduces computer-assisted models for land-suitability analysis.

PLAN 220 - History and Theory of Planning 1 (3)
Growth and evolution of cities. Evolution theories and practice of urban planning, emphasizing the United States before 1940.

PLAN 221 - History and Theory of Planning 2 (3)
Evolution of theories and practice of urban planning, emphasizing the United States since 1940. Interaction of public and private initiatives directed toward urban and environmental problems.

PLAN 240 - Planning and Private Development (3)
The process of private-sector land development, including market analysis and site selection, physical design, financing, legal constraints, and assembly of the development package.

PLAN 261 - Communication and Presentation Techniques (3)
Development of graphic and visualization skills for planners. Use of a variety of communication techniques and media for public presentation. Open only to urban planning majors and minors.

PLAN 302 - Urban and Neighborhood Analysis Studio (4)
Collection, analysis, and communication of information for urban- and neighborhood-scale planning, including use and interpretation of published data sources, field surveys and inventories, and interviews. Prerequisite: PLAN 203.

PLAN 303 - Economic Development Studio (4)
Methods of analyzing local economic condition and performance, both qualitative and quantitative. Three local economies are examined: neighborhood, municipal, and region. Formulation of an economic development plan involving all three interacting economies and a set of policies to improve their performance. One or more sites and land uses are selected strategically toward plan implementation, and are analyzed as to their legal, market, financial and operational feasibility. The plan is mentored by, and presented to, external jurors in the field. Required for BUPD major and RED minor. Prerequisite: PLAN 203; waived for minors in Real Estate Development upon permission of the instructor or department.

PLAN 320 - Quantitative Methods for Urban Planning (4)
Calculation, application, and interpretation of statistics and quantitative models used in urban planning. Topics include association, variation, probability, sampling, regression, and models for population forecasting.

PLAN 350 - Computer Applications in Planning (3)
Microcomputer applications using spreadsheets, databases, and modeling and mapping packages suitable for planning and development office use. Brief overview of Intergraph graphic and mapping applications.

PLAN 365 - Economic Development Planning (3)
Strategies and tools for stimulation of local economic growth including government incentives, financing alternatives, and examples of public-private partnership in strategic planning.
PLAN 369 - Planning Internship (0)
Supervised work experience for at least 200 hours in an approved planning or development organization. Students to prepare portfolios for review. Offered credit/no credit only. Prerequisite: completion of the program's third year or permission of the department chairperson.

PLAN 401 - Field Studio (4)
Analysis and application of planning skills in a real-world setting, involving an actual community or outside client. Emphasizes smaller town or rural planning issues. Prerequisite: PLAN 302.

PLAN 402 - Field Studio (4)
Analysis and application of planning skills in a real-world setting, involving an actual community or outside client. Emphasizes urban planning issues. Prerequisite: PLAN 302.

PLAN 404 - Urban Design (3)
An exploration of the physical form of the public realm and how it has been shaped by social, economic, political, and cultural forces. Special attention will be paid to issues of identity, sense of place, placemaking, and sense of belonging.

PLAN 411 - Property Law (1)
Essential state and federal statutes and codes as well as case law, regulating real estate and its transaction, including landlord/tenant relations, deed encumbrances and covenants, memorialized developer commitments, forms of realty ownership and leasing, mortgage sureties and financing, and contractual instruments of public-private partnerships. Historic evolution of this body of law and development instruments and their effectiveness in promoting the public interest. Not open to students who have credit in RE 230.

PLAN 412 - Introduction to Geographic Information Systems for Urban Planning (3)
Designed to introduce principles of GIS and GIS applications in an urban environment. Topics include GIS components, modeling methodology, and management of environments. Implications for urban and environmental policy development.

PLAN 413 - Advanced Concepts in Geographic Information Systems for Urban Planning (3)
Advanced topics in modeling and analysis of urban and regional environments. Techniques for database organization, database development, and analytical processes (algorithm development). Prerequisite: PLAN 412.

PLAN 421 - Urban Land-use Planning (3)
Principles of urban land-use planning for newly developing areas and for changing older communities. Attention to environmental, efficiency, and aesthetic concerns in urban growth. Preparation of the comprehensive urban land-use plan.

PLAN 425 - Urban Agriculture as Community Development (3)
Examines the growing role of urban agriculture in cities and the implications for community development and design. Examines the broad issues of food production and distribution along with related policies. Focuses on the present discourse associated with food security. Sustainability provides a framework under which communities better use natural resources, create infrastructures that are more efficient, protect and enhance quality of life, and create new, greener businesses that strengthen their economies without compromising the environment.

PLAN 428 - Urban Impact Analysis (3)
Techniques for estimating the environmental, socioeconomic, fiscal, and energy effects of proposed plans and development projects.

PLAN 430 - Housing and Community Development (3)
Analysis of public programs and market conditions affecting housing and community development, housing supply and demand, finance, the role of government subsidies.

PLAN 431 - Urban Transportation Planning (3)
Transportation planning methods and policy, including analysis of travel demand, links between land use and transportation, choice of transportation modes, and design of balanced transportation systems.

PLAN 433 - Environmental Planning (3)
Introduction to the fundamental issues and technologies associated with planning for sensitive use of environmental resources. Topics include waste management, air and water quality planning, ecological systems, and methods of environmental analysis and implementation.

PLAN 435 - Energy Planning (3)
Energy resource issues in urban planning. Strategies for incorporating energy efficiency in housing, land use, transportation, social services, and community development. Analysis of energy policy, emphasizing
innovative public and private sector initiatives at the community level.

**PLAN 436 - Theory of Urban Spatial Planning (3)**
Seminar in theories of location and development of principal urban activities including transportation, housing, industry, commercial centers, and public facilities. Implications for urban-planning policies.

**PLAN 439 - Community Facilities Planning (3)**
Design principles and economic conditions in planning for urban physical facilities, including recreation facilities, streets, sidewalks, drainage, water supply systems, sewerage, waste treatment, and others.

**PLAN 440 - Building Performance (3)**
A scientific approach to understanding how energy and moisture move in buildings and how buildings fail with respect to health and safety, durability, comfort, and affordability. While the focus is on housing, the fundamentals are applicable to all buildings.

**PLAN 441 - Sustainable Housing (3)**
A survey of sustainable housing typologies, with an emphasis on their design and integration into existing planning law frameworks. Includes discussion of energy ranking systems, sustainable material use, and response to local climatic and geologic conditions.

**PLAN 450 - Neighborhood Planning (3)**
Planning strategies for revitalization of older residential neighborhoods and neighborhood commercial areas. Includes community organization and the role of public and private neighborhood organizations.

**PLAN 451 - Issues of Planning Practice (3)**
Capstone seminar to explore application of theory to planning practice and management. Issues of planning ethics, citizen participation, styles and strategies for effective implementation of planning. Prerequisite: PLAN 369; PLAN 401 or 402.

**PLAN 452 - Urban Planning Law (3)**
Legal tools for plan implementation, including zoning, subdivision regulations, planned unit-development regulations, and other techniques for guiding urban development while balancing community interests and private property rights.

**PLAN 453 - Center City Revitalization (3)**
Strategies for revitalization of core urban areas, including case studies of successful cities. Examples include employment-based, recreation and convention-based, and residentially-based revitalization.

**PLAN 455 - Women and Urban Environments (3)**
Examines the linkages between women and urban environments by focusing on the role played by the urban environment in facilitating/hindering women’s access to economic, social, and political opportunities. Domestic and international examples are used to illustrate concepts.

**PLAN 458 - Introduction to Multiculturalism as a Planning Context (3)**
An analysis of planning issues in diverse societies with a focus on the USA. The class explores meanings of cultural diversity, social segregation, subordination, exclusion, and marginalization, and how these variables affect the urban society and fabric. Approaches to urban planning are explored that deal with the various interpretations of a diverse and uneven social context.

**PLAN 459 - International Development and Planning (3)**
An exploration of the nature of the urban and regional planning process in other countries. Topics include development policies, planning strategies, institutional structures, implementation strategies, and accomplishments. Attention also will be paid to the usefulness of these experiences to American cities.

**PLAN 460 - Alternative and Sustainable Community Planning (3)**
Seminar course examining nontraditional approaches to community planning and design. Focuses on concepts associated with the design of sustainable communities. Historical precedent, case study, and utopian alternatives are synthesized to project alternative futures for present community planning and design issues.

**PLAN 461 - Emergency and Disaster Planning (3)**
Examination of natural disasters and what planning and design measures can be undertaken to prevent and/or mitigate those disasters. Focuses on tornadoes, hurricanes, flash floods, earthquakes, and other natural and human-made disasters. Recent examples of natural and human-made disasters will serve as case studies.

**PLAN 465 - Community Development and the Faith Based Initiative (3)**
A participatory lecture course that looks at the origins of community development in urban neighborhoods throughout the United States. Examine the influences of the civil rights movement, housing policies, and community activists who shaped this movement.
Additionally, looks at the role of religious institutions in urban communities and current issues surrounding faith based community development.

**PLAN 477 - History of Urban Form (3)**
An examination of the historical transformation of the urban form and its elements. Focuses on the physical organization of the city in relation to social, economic, political, and cultural forces that have shaped it. Special attention will also be paid to non-Western urban forms and histories.

**PLAN 481 - Public Participation: Issues, Methods, Techniques for Knowing the Public Interest (3)**
Issues and qualitative methods/techniques useful to the planner's paramount responsibility: understanding/integrating local knowledge and values into the public decision-making process. Issues and theories of public participation. Methods and skill techniques of being informed by the public, of informing the public, and of advancing planner/constituency collaboration.

**PLAN 482 - Grant Procurement and Administrators for Planners (1 TO 3)**
Techniques of proposal writing including RFP and RFQ responses, and grant procurement, including intergovernmental, foundation and corporate giving, contract negotiation and administration, and lobbying strategies. A total of 3 credits may be earned.

**PLAN 484 - Advanced Digital Communication (3)**
Advanced graphic design representation and presentation techniques in the digital environment. Emphasis on portfolio building and online marketing of digital rendering skills.

**PLAN 485 - Introduction to Community Development and Enterprise Planning (3)**
An overview of the basic principles of real estate, community development, and enterprise planning practices with an emphasis on the roles played by the three economic sectors: public sector, private sector, and not-for-profit sector. Review of the development process and the various financing tools used to make projects a reality, with emphasis on the role of the planner in the overall implementation process. Topics also include emerging trends in community development, including the growth of the not-for-profit sector, public/private partnerships, and shifts in state and federal policies towards rebuilding communities. Prerequisite: PLAN 240; at least junior standing.

**PLAN 486 - Methods of Public Interest Development (3)**
From an enterprise planning perspective, the rationale and methods of development. Finance: proforma, break-even cash flow, equity investment, lender underwriting, and gap financing analyses; public-private partnerships incorporating range of development inducements. Strategies for creating markets given disinvestment pattern. Managing community development organization and projects through development process.

**PLAN 490 - Independent Study in Planning (1 TO 9)**
Independent study in urban planning and development topics undertaken on an individual basis with guidance of a faculty member. Prerequisite: permission of the department chairperson. A total of 9 credits may be earned.

**PLAN 498 - Special Projects in Urban Planning and Development (3 TO 9)**
Special projects in urban planning and development undertaken by groups of students under faculty direction. A total of 9 credits may be earned.

**PMGT - RESIDENTIAL PROP MGT**

**PMGT 104 - Housing Decisions (3)**
Overview of the importance of housing and the options available. Topics include location, house plans, ownership, renting, legal and financial aspects, architectural styles, cultural issues, and special housing needs. Designed to meet the needs of housing consumers and those seeking a housing-related career. Open to all students.

**PMGT 123 - Interior Design Basics (3)**
Introduction to interior graphic communication techniques and space planning for residential environments. Design considerations, selection, specifications, and calculations for materials will be discussed. Not open to interior design majors or minors.

**PMGT 235 - Introduction to Residential Property Management (3)**
Introduction to professional practices in residential property management. Identification and exposure to career opportunities in the field.

**PMGT 255 - Facilities Management (3)**
An introduction to professional practices in facilities management. Identification of and exposure to career opportunities in the field.
PMGT 275 - Marketing and Leasing Residential Properties (3)
Attracting and retaining qualified residents is the foundation of the multi-family housing industry. Through hands-on activities and investigations, the appropriate skills for successfully marketing and leasing of residential properties are provided. Prerequisite: PMGT 104 and 235.

PMGT 305 - Maintenance for Property Managers (3)
Maintenance issues that individuals in management positions will encounter are explored. Topics include types and financial implications of maintenance, general and special maintenance needs, and dealing with personal and property safety. Identifies strategies for hiring and working with maintenance personnel. The course includes a lab with experiences in property maintenance. Prerequisite: PMGT 235 or permission of the department chairperson.

PMGT 315 - Senior Housing: Design, Marketing, and Management (3)
Exploration of the principles that guide the design, marketing, and management of housing for older adults. Application of these principles through projects and field experiences. Prerequisite: PMGT 235 and junior standing, or permission of the department chairperson.

PMGT 330 - Apartment Financial Management (3)
Residential property managers are responsible for the day-to-day and long-term financial condition of the housing communities they manage. This course equips students with the knowledge and skills necessary to add value to investment properties. Prerequisite: PMGT 369; RE 230; junior standing.

PMGT 350 - Residential Equipment, Energy and Technology (3)
Exploration of the selection, use, care, and disposal of major equipment for residential uses. Analysis of household energy use and techniques for conservation. Includes the study of technological advances in residential equipment. Open to all students.

PMGT 369 - RPM Internship (3 OR 6)
Provides students the opportunity to work in an established internship setting to gain professional experience in residential property management. Prerequisite: ACC 201 and HOSP 210 and PMGT 275 and 305; permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

PMGT 375 - Simulation in Residential Property Management (3)
Application of residential property management skills practiced through a simulation activity. Prerequisite: PMGT 330; junior standing.

PMGT 400 - Housing and Society (3)
Explores the relationship between housing norms and public policy, mass media, fine/applied art, literature, entertainment, education, and personal relationships, from an individual and societal perspective. Emphasis on how these factors reflect and influence housing beliefs, decisions, and aspirations. Prerequisite: PMGT 104; junior or senior standing.

PMGT 405 - Management of Government-Assisted Housing (3)
Identification of government-assisted housing programs and the role of management in meeting the needs of owners, residents, and regulatory agencies. Prerequisite: PMGT 235; junior standing.

PMGT 425 - Residential Property Management Project (3)
Provides hands-on opportunities in using industry standards to analyze an apartment community. The resulting project provides the management company with information to remain competitive in the apartment market. Prerequisite: PMGT 330; senior standing or permission of the department chairperson.

PMGT 435 - Trends and Issues in Residential Property Management (3)
Provides the opportunity to identify, research, and disseminate information on the trends and issues affecting the residential property management industry. Students will be able to demonstrate their ability to find and use a wide variety of resources. Prerequisite: PMGT 369 and senior standing, or permission of the department chairperson.

POLS - POLITICAL SCIENCE
POLS 130 - American National Government (3)
The examination of the essential elements of our national government. Emphasis on institutions, policies, and processes. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1002)
POLS 140 - Introduction to the Legal System (3)
Introduction to the operations of the American legal system with respect to legal concepts, judicial philosophies, types of law, and the political environment.
POLS 141 - Introduction to Legal Studies (3)
The course exposes students to career options within the legal studies major, builds professional skills, and provides an overview of substantive areas of law. Topics covered include legal ethics, conducting legal research and writing, creating professional resumes, career options in the legal profession, and overview of substantive areas of legal study and practice. Prerequisite: permission of the department chairperson or legal studies director.

POLS 203 - Introductory Issues in Political Science (3)
An introductory investigation of a particular topic, problem, or issue in the field of Political Science with emphasis on subfields, specialties, and materials not covered in established Political Science courses. The topic is announced before each semester. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

POLS 210 - Political Science Research Methods (3)
Introductory study of political science research methods. Examines political science as a systematic empirical discipline concerned with describing and explaining political phenomena. Substantial emphasis is placed on the use of basic statistics and computers as tools in the scientific study of politics.

POLS 229 - Law Office Management and Technology (3)
Will teach students law office management principles and show how various technologies can help in every area of the legal business. Students will learn to use technologies that help with case management, document production, spreadsheets, e-discovery, timekeeping, billing, and communicating with and preparing clients for trial. In building a law practice from the ground up, students will learn about market analysis, budgeting, advertising, and managing personnel, among other topics. Prerequisite: POLS 242. Open only to legal studies majors.

POLS 237 - State and Local Politics (3)
Politics, policies, and structures of state and local governments in the United States.

POLS 238 - Urban Government in the United States (3)
Examines how cities are governed in the United States and what policies have been derived to deal with the problems of the cities. The problems of race and poverty and public policies to address them will be considered.

POLS 241 - Family Law (3)
The focus of this course is on legal issues that arise in domestic relationships. Topics covered include marriage, divorce, child custody, support, and adoption. Students will complete a number of service-learning hours volunteering with a community partner organization that deals with issues of family law. Prerequisite: Permission of department chairperson or legal studies coordinator.

POLS 242 - Legal Research and Writing (3)
An analysis of court procedures and appeal procedures, an in-depth examination of reference sources available to attorneys, and improvement of research and writing skills. Prerequisite: POLS 141; permission of the department chairperson.

POLS 243 - Litigation (3)
For the legal studies major focusing on litigation and related areas of paralegal responsibilities such as drafting interrogatories and writing complaints. Special attention given to learning the compilation of a trial notebook in preparation for litigation. Prerequisite: POLS 141 and 242. Open only to Legal Studies majors.

POLS 250 - Access to Justice in the Legal System (3)
Addresses issues of access to justice in the United States civil and criminal court systems. Students will explore access to justice theories, analytical frameworks for addressing access to justice problems, and potential solutions to those problems. Topics for discussion include justice as it relates to poverty, race, class, and gender. Requires students to complete a number of service learning hours with community partners. Open only to legal studies majors.

POLS 280 - Comparative Political Systems (3)
A comparative introduction to politics and government in major democratic, communist/post-communist, and developing countries of the contemporary world.

POLS 281 - Economic and Political Problems of Emerging Nations (3)
Historical and contemporary problems of the less-developed nations. Conditions contributing to economic, political, and social change. Problems of economic development policies and programs within the institutional structure. Internal and external pressures that influence patterns of development. Not open to students who have credit in ECON 279.
POLS 290 - American Foreign Policy (3)
An introduction to the process of making United States foreign policy, American strategic doctrines, and major foreign policy issues.

POLS 293 - International Relations (3)
A survey of the formal relations among sovereign states in the international system, emphasizing diplomacy, the elements of power, and the procedures for conflict resolution. May include computer simulation exercises. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1003)

POLS 312 - Early Western Political Thought (3)
Analysis of political thought in the early Mediterranean and medieval worlds that became foundational to modern political theories, ideas, ideologies, and institutions in the West. Emphasizes the classical Greek and Roman periods.

POLS 313 - Modern Western Political Thought (3)
Analysis of political thought from the late medieval through contemporary worlds that proved central to political ideas, ideologies, and institutions in the West.

POLS 320 - Tort Law (3)
Provides a detailed overview of tort law in the United States. Topics covered include intentional torts, personal injury, negligence law, remedies, products liability and strict liability. Students will learn to analyze legal conflicts by applying methods used by legal professionals in order to identify and discuss tort law issues. Students will also prepare legal pleadings and discovery materials. Other topics include ethics and client relations. Prerequisite: POLS 141 and 242. Open only to Legal Studies majors.

POLS 340 - Introduction to Law and Enforcement (3)
Survey of the criminal justice system as a political entity in the United States. Special attention given to the actors in the system, their interrelationships, and purposes. Includes discussion of the media, elites, and the public. Prerequisite recommended: POLS 130.

POLS 342 - Problems in Public Policy (3)
A systematic examination of the institutions and processes central to understanding and evaluating domestic public policies in the United States. Emphasizes the theoretical and political aspects of policy making at the national level and implementation within a federal system.

POLS 344 - Advanced Legal Research and Writing (3)
Builds upon knowledge and skills acquired in legal research and writing and litigation courses. Develop and refine research skills, work with reference sources, be expected to complete research assignments and prepare legal documents and memoranda. Prerequisite: POLS 243; permission of the department chairperson. Open only to legal studies majors or by permission of the legal studies program coordinator.

POLS 345 - National Defense Policy (3)
An analysis of the cultural, historical, and political forces that shape American defense policy. Emphasizes the relationships between the military services; between the Congress, the President and the Courts; the role of the media; and the larger international strategic environment.

POLS 347 - Environmental Law and Policy (3)
Study of the American political and legal system’s response to environmental problems. Politics of environmental policy making, problems of policy implementation, environmental law cases, and trends toward global environmental governance are considered.

POLS 350 - Public Administration (3)
Describes theories and practices of public administration in the United States and the development, implementation, and evaluation of government policies and programs. Surveys topics such as political structures, personnel, budgets, and administrative laws and regulations.

POLS 370 - Public Opinion and Political Behavior (3)
Patterns and trends in public opinion and political behavior; processes leading to those patterns and trends; and the consequences for democratic theory, public policies, and political patterns in the United States and other countries. Prerequisite: POLS 210 or permission of the department chairperson.

POLS 372 - Political Campaigns (3)
Considers political campaigns from theoretical and practical perspectives as the link between citizens and the government in a representative democracy. Designed to answer questions on the theory, strategies, and techniques of political campaigns. Prerequisite recommended: POLS 130.

POLS 373 - Survey Research Methods (3)
Methods by which information is obtained on the voting behavior and attitudes of the electorate. Emphasizes producing a working knowledge of polling techniques. Includes such topics as sampling, interviewing, and questionnaire construction. Prerequisite: POLS 210. Prerequisite recommended: POLS 370.
POLS 375 - Media and Politics (3)
Examines the impact of the media (particularly the news media) on American politics and policies. Areas of inquiry include media effects on political campaigns, public deliberation, policy formation, and political leadership.

POLS 384 - Politics in the British Isles (3)
A comparative multi-level study of the governance of the United Kingdom (England, Scotland, Wales and Northern Ireland) and the Republic of Ireland; their political cultures, party systems, political institutions, and policy problems with specific reference to the prospects of UK disintegration and of European integration.

POLS 385 - Politics of the European Union (3)
Study of the development of the European Union as an evolving political entity – its politics, institutions, policies – and the prospects for European unification.

POLS 390 - Honors Colloquium in Political Science (2)
Exploration of selected issues and topics in political science, emphasizing individualized study. Prerequisite: permission of Honors College or the department chairperson. Open to students in the Honors College and to other students by permission of the department chairperson.

POLS 392 - The United Nations and International Organization (3)
Concentrated study of the United Nations and other international organizations focusing on the structure, functions, and current issues facing the United Nations.

POLS 394 - International Relations in Asia (3)
A survey of contemporary international relations in Asia and the Pacific, emphasizing the roles of major powers in this area.

POLS 395 - Politics of the Global Economy (3)
Historical and theoretical introduction to the politics of international trade and payments, including barriers to trade, exchange rates, multinational corporations, financial crisis, international economic institutions, and the problems of economic development.

POLS 403 - Issues in Political Science (3 TO 6)
Investigation of a particular topic, problem, or issue in the field with emphasis on subfields, specialties, and materials not covered in established courses. The topic is announced before each semester. Prerequisite: POLS 130 or 293 or permission of the department chairperson. A total of 6 credits may be earned. Open only to juniors and seniors.

POLS 405 - Reading and Special Study (3 TO 6)
Topics selected and investigated in consultation with a professor and department chairperson. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned. Open to juniors and seniors with special aptitude and interests which qualify them for conducting independent study and research.

POLS 407 - Workshop in Political Science (3)
Intensive study of selected problems in political science. Prerequisite: permission of the department chairperson.

POLS 408 - Topics in Legal Studies (3)
Topics in legal studies selected and investigated in consultation with departmental faculty and the department chairperson. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to legal studies majors.

POLS 411 - American Political Thought (3)
An investigation of fundamental ideas and ideologies within American political thought – from the colonial period to the present – like classical republicanism, the English constitution, Puritanism, the Founding, federalism, Manifest Destiny, the Union, the frontier, democracy, capitalism, liberalism, conservatism, progressivism, individualism, and the American vision of international order. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 431 - Congress (3)
Analysis of the legislative process with focus on the United States Congress. The process of legislative decision making will be highlighted. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 432 - The Presidency (3)
Analysis of the power and roles of the American president. Problems of jurisdiction, leadership, authority, and communication are examined. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 433 - The Judiciary (3)
Analysis of the nature and functions of state and federal judicial systems. Emphasizes the United States Supreme Court and the opinions and behavior of the justices. Prerequisite: POLS 130 or permission of the department chairperson.
POLS 434 - State Legislatures (3)
Legislative systems in American state government. External influences (constituencies, political parties, interest groups), internal influences (organizational structure, staff, norms, decision making), issues confronting state legislatures, and reform proposals. Prerequisite: POLS 237 or 431 or permission of the department chairperson.

POLS 435 - Intergovernmental Conflict and Cooperation (3)
Analysis of the role of conflict, cooperation, dependence, and interdependence among federal, state, and local governments in shaping political relationships and public policy in the American federal system. Examine major conflicts and controversies related to federalism and intergovernmental relations and identify the constitutional principles underlying them. Prerequisite: POLS 237 or permission of the department chairperson.

POLS 437 - Government and Politics of Indiana (3)
Survey of Indiana's political culture and tradition as compared to other states. Critical examination of Indiana's contemporary political processes and governmental policies. Prerequisite: POLS 130 or 237 or permission of the department chairperson.

POLS 438 - Metropolitan Problems (3)
Analysis of the problems of cities and metropolitan areas. Prerequisite: POLS 130 or 238 or permission of the department chairperson.

POLS 443 - American Constitutional Law (3)
Constitution of the United States, its development and interpretations through United States Supreme Court opinions and political developments. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 444 - Constitutional Liberties (3)
Relations between the individual and the government as revealed through cases in constitutional law. Content includes cases involving the Bill of Rights and the Fourteenth Amendment. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 445 - Advanced Litigation and Alternative Dispute Resolution (3)
Serves as a capstone course for legal studies students going beyond the introductory litigation class to immerse students in the trial and alternative dispute resolution processes. Students will conduct mock trials, motion hearings, discovery conferences, negotiations, mediations, and arbitrations, as well as create trial exhibits. Class emphasizes concrete application of classroom theories and concepts to real world situations. Prerequisite: POLS 141 and 242 and 243, or permission of the program director. Open only to legal studies majors.

POLS 450 - Masculinity and Politics (3)
Introduces students to the discipline of masculinity studies and shows how the discipline can enhance our understanding of politics in different historical periods. Particularly emphasizes how influential political thinkers – like Plato, Machiavelli, and Nietzsche – impacted the mutual development of masculinity and politics in the classical Greek and Roman and modern European and American worlds. Prerequisite: POLS 312 or 313 or permission of the department chairperson.

POLS 454 - Politics and Administration of Local Government Budgets (3)
An analysis of local government budgeting emphasizing political and administrative issues in budget preparation and accountability. Prerequisite: POLS 237 or permission of the department chairperson.

POLS 455 - Administrative Law (3)
Legal and political study of independent regulatory agencies; their powers, functions, and roles. Prerequisite: POLS 130; or permission of the department chairperson.

POLS 457 - Alternative Dispute Resolution (3)
Study of processes and techniques used to settle disputes without court adjudication, including theoretical and practical application such as negotiation, mediation, arbitration, summary jury trials, mini-trials, and settlement week. Classroom simulations will be augmented by presentations by attorneys and paralegals. Open only to legal studies majors, peace and conflict studies minors, or by permission of the department chairperson.

POLS 460 - Public and Social Entrepreneurship and Social Change (3)
Designed to provide students with an understanding of the basic theories and concepts of public and social entrepreneurship in creating social change in our community. The course will focus on roles, structures, strategies and tactics that public and not-for-profit organizations can and do use to make change at individual, policy, and societal levels. Prerequisite: POLS 237 or 342 or 350 or permission of the department chairperson.

POLS 461 - Community Planning and Its Administration (3)
Planning and development of improved land use and service activities of cities and predominantly urban
communities. Consideration of scope, legal basis, implementation, and problems of planning for streets, utilities, education, recreation, transportation, zoning, and related community services. Prerequisite: POLS 237 or 238; or permission of the department chairperson.

POLS 465 - Labor-Management Relations in Government (3)
Examines public employee unionization, legal provisions for collective bargaining, determination and recognition of bargaining units, bilateral negotiation, third-party involvement procedures, administration of agreements, and the processes and strategies in collective bargaining negotiations in public organizations. Prerequisite: POLS 237 or permission of the department chairperson.

POLS 466 - Administrative Problems in State Government (3)
An analysis of administrative procedures and organizational behavior at the state level. Special emphasis is given to the provision of government services and functions in the major areas of budgeting and taxation, education, environmental protection, public health, and public works. Prerequisite: POLS 237 or 350 or permission of the department chairperson.

POLS 471 - Public Interest Groups and Government (3)
Provides an overview of the power and impact that interest groups have on public policy in the United States. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 473 - American Political Parties (3)
Organization and functions of political parties in the United States and their role in a representative democracy. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 474 - Women and Politics (3)
National survey of women and the political process, with an emphasis on women and contemporary public policy issues. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 475 - Minority Group Politics (3)
Deals with political impact of minority groups on American politics. Emphasizes both legal and extralegal means by which minority groups become involved in and influence public policy. Prerequisite: POLS 130 or permission of the department chairperson.

POLS 478 - Practical Experience in Government, Politics, or Public Service (3 TO 6)
Part- or full-time experience in government office, nonprofit organization, political campaign, or other firm or organization concerned with government, politics, public policy, or public service. Assignments depend upon the interest of the student and the needs of the sponsor. Prerequisite: permission of the department chairperson or internship coordinator; completed at least 75 credits, including a minimum of 18 credits of POLS courses. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Not open to students who have credit in POLS 404. Open only to Political Science majors.

POLS 479 - Practical Experience in Law (3)
Full or part-time experience for one or more semesters in a legal office in the public, private, or non-profit sector. Student will be supervised by a practicing attorney. Assignments depend on the interest of the student and the needs of the sponsor. Prerequisite: POLS 344; permission of the department chairperson or Legal Studies program director. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

POLS 480 - Access to Justice Clinic (3)
For legal studies majors, the ATJ Clinic allows students to work with community partners in order to provide legal services to underserved populations. Students will work directly with attorneys and clients to address the legal needs of the client. Student activities may include interviewing clients and witnesses, researching, and drafting court documents, conducting investigations, attending judicial hearings, and testifying in court. Prerequisite: POLS 141 and 242 and 243 and 250. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to legal studies majors.

POLS 482 - Government and Politics of Western Europe (3)
A comparative analysis of the governmental institutions, electoral systems, political parties, and policy problems of the United Kingdom, France, Germany, and Italy. Their roles as national actors in the process of European integration are also considered. Prerequisite: POLS 280 or permission of the department chairperson.

POLS 486 - Politics of Russia and the Successor States (3)
Examines the rise and decline of the Soviet empire and evaluates the challenges facing the current Russian government. The focus is primarily upon Russian politics, although comparisons are made with other countries in the region, in order to investigate and evaluate the political
processes that are developing throughout the area. Prerequisite: POLS 280 or permission of the department chairperson.

**POLS 488 - Government and Politics of China (3)**
A comprehensive survey of the government and politics of both the Republic of China and the People's Republic of China. Prerequisite: POLS 280 or permission of the department chairperson.

**POLS 490 - International Law (3)**
A survey of the Law of Nations by analyzing decisions of international tribunals, examining legal principles, and the development of international law. Prerequisite: POLS 293 or permission of the department chairperson.

**POLS 493 - World Politics (3)**
Theories of contemporary interactions among states, especially the major powers. Particular attention given to conflict resolution. Prerequisite: POLS 293 or permission of the department chairperson.

**POLS 494 - Politics of Terrorism (3)**
Study of the various aspects of terrorism in both the international and domestic communities, from its origins, causes, and scope to its effectiveness and growth. Exploration of terrorism as a political and social phenomenon, as well as the current and future threat of terrorism, both foreign and domestic. Prerequisite: POLS 293 or permission of the department chairperson.

**POLS 495 - Foreign Policy of China (3)**
A comprehensive analysis of China's role in international politics, emphasizing the effects of the foreign policy of the People's Republic of China. Prerequisite: POLS 293 or permission of the department chairperson.

**PSYS - PSYCHOLOGICAL SCIENCE**

**PSYS 100 - Introduction to Psychological Science (3)**
Introduction to various branches of psychology and the contributions of each to understanding the behavior of people as they interact with their environment. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1020)

**PSYS 241 - Statistics (3)**
Descriptive statistics and statistics of inference. The computation, application, and interpretation of various elementary statistics. Prerequisite: PSYS 100; and a C or higher in one of the following courses: MATH 125 or MATH 132 or MATH 161 or MATH 165 or MATH 201 or MATH 207.

**PSYS 284 - Research Methods in Psychological Science (4)**
Introduction to the use of the scientific method in the study of human behavior. Analyze and evaluate experimental studies to gain experience with research techniques while using essential controls and acceptable procedures. Prerequisite: PSYS 241 with minimum grade of C.

**PSYS 285 - Professional Ethics in Psychology (1)**
Introduces selected ethical issues in psychological research and practice. Offered only online through Online and Distance Education. Offered credit/no credit only. Prerequisite: PSYS 241. Open only to psychological science majors.

**PSYS 295 - Career Planning in Psychology (1)**
Helps develop an awareness of psychology courses, minors, internships, research and teaching assistantships, and other opportunities; learn about career options and graduate school selection processes; and explore personal strengths and weaknesses with regard to long term goals. Prerequisite: PSYS 100. Open only to psychological science majors.

**PSYS 301 - Health Psychology (3)**
Examines how psychological conditions influence disease prevention, medical treatment, stress and coping, and psychosocial adjustment to illness. Prerequisite: PSYS 100.

**PSYS 313 - The Psychology of Human Adjustment (3)**
An introduction to how people can cope more effectively with common emotional, interpersonal, and situational problems. Self-management strategies and positive coping techniques are introduced for the enhancement of personal growth and adjustment. Prerequisite: PSYS 100.

**PSYS 316 - Social Psychology (3)**
Overview of conditions that affect a person in a social context: attitudes, impression formation, interpersonal relations, and group membership. Examines current theories and relevant research. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1024) Prerequisite: PSYS 100.

**PSYS 317 - Personality (3)**
Presents and compares a wide variety of classical and modern theories of personality and pertinent empirical research. Considers the components of a good theory of personality and the applications of various personality theories. Prerequisite: PSYS 100.
**PSYS 318 - Psychopathology (3)**
Systematic study of behavior pathology. Primary emphasis on the use of theoretical perspectives and empirical data to understand the description, etiology, prognosis, treatment, and prevention of abnormal behavior. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1023). Prerequisite: PSYS 100.

**PSYS 321 - Developmental Psychology (3)**
A survey of theory and research in biological, cognitive, social, and emotional development across the lifespan. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1021) Prerequisite: PSYS 100.

**PSYS 324 - Psychology of Women (3)**
Explores both biological and social influences on women's experiences, behavior, self-concepts, and psychological conflicts. Topics covered include relationships, work, gender across the lifespan, violence, health, sex-related differences, and women in the future, with an emphasis on the diversity of women's experiences. Prerequisite: PSYS 100.

**PSYS 325 - Psychology of Prejudice and Discrimination (3)**
Psychological perspectives on prejudice and discrimination, including stereotyping, individual differences, the development of prejudice, social factors in prejudice, the experience of prejudice, and reducing prejudice and discrimination. Prerequisite: PSYS 100.

**PSYS 326 - Psychology of Diversity (3)**
Presents current knowledge and research concerning the psychological study of diversity. Consideration may be given to ethnicity, sexual orientation, gender, disability, aging, and other aspects of cultural diversity; the intersection of these dimensions; and issues of societal privilege and disadvantage. Prerequisite: PSYS 100.

**PSYS 362 - Motivation and Emotion (3)**
Basic theory and research relating to motivation and emotion and applications to various facets of human behavior. Prerequisite: PSYS 100.

**PSYS 363 - Cognitive Psychology (3)**
Survey of theories and research about human thought and memory. Topics include attention, memory, problem solving, and language. Prerequisite: PSYS 100.

**PSYS 364 - Psychology of Learning (3)**
Nature of learning processes, possible influences upon these processes and resultant behaviors, and applications of the psychology of learning. Prerequisite: PSYS 100.

**PSYS 367 - Introduction to Neuroscience (3)**
A biological systems approach to cognition and behavior. Emphasizes biological aspects of the central nervous system leading to neuropsychological processes in the brain. Prerequisite: PSYS 100.

**PSYS 368 - Sensation and Perception (3)**
Survey of theories, methods, and knowledge concerning sensory physiology, sensation, and perception. Emphasizes studies of people. Prerequisite: PSYS 100.

**PSYS 371 - Applied Behavior Analysis (3)**
Introduction to the principles of behavior analysis and application of these principles outside formal educational settings. Includes both operant and cognitive approaches. Prerequisite: PSYS 100.

**PSYS 373 - Industrial Psychology (3)**
Application of psychological principles to personnel selection, training, and evaluation; worker motivation and morale; leadership and supervision; job design; and workplace health and safety. Prerequisite: PSYS 100.

**PSYS 377 - Psychology of Sexual Behavior (3)**
An examination of the determinants of human sexual behavior, focusing on the development of sexual identity and attitudes. Uses a variety of psychological theoretical perspectives including sociobiological, learning, psychodynamic, and biological to build an understanding of this most complex behavior. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1022) Prerequisite: PSYS 100.

**PSYS 395 - Special Topics in Psychology (1 TO 9)**
Surveys theory and research on a selected topic in psychology using a lecture and discussion format. Prerequisite: PSYS 100. A total of 9 credits may be earned provided that no topic is repeated.

**PSYS 441 - Advanced Statistics (3)**
Inferential statistics and research design, computation and interpretation of statistics related to psychological research design. Critical analysis of published research literature. Prerequisite: PSYS 241.
PSYS 447 - Tests and Measures in Psychological Science (3)
Theoretical and practical foundations underlying the construction, use, interpretation of standardized psychological tests and inventories, and development of a psychological measure. Prerequisite: PSYS 284.

PSYS 468 - Cognitive Neuroscience (3)
Focuses on the biological systems involved in higher thought processes, particularly examining the connections between brain and behavior through reading and discussion of current articles in the field. Emphasis is given to the connection between brain and mind. Prerequisite: PSYS 284. Prerequisite recommended: PSYS 367. Open only to juniors and seniors.

PSYS 471 - Psychology in the Legal System (3)
An investigation of the scientific literature associated with psychology in the legal system and forensic psychology. Prerequisite: PSYS 100. Open only to juniors and seniors.

PSYS 475 - Advanced Industrial Psychology (3)
Introduction to principles of staffing organizations. Emphasizes job analytic methods, recruiting, interviewing, testing, test validation strategies, utility analysis, performance appraisal, and employment discrimination. Prerequisite: PSYS 100 and 373.

PSYS 476 - Human Factors Psychology (3)
Explores the relation between people and the physical things in their environments. Topics include design of objects based on psychological knowledge about information display, human control, and cognitive capacities. Prerequisite: PSYS 100.

PSYS 477 - Seminar for Teaching Assistants (1)
Designed for students who are serving as first-time teaching assistants for psychological science courses. Helps them integrate their teaching assistantship duties with the pedagogy of the teaching of psychology, including ethical issues and working with a diverse student body. Offered credit/no credit only. Prerequisite: PSYS 100 and permission of the instructor.

PSYS 478 - Teaching Assistantship (1 TO 3)
Under the supervision of the instructor of a course, students will carry out course-related duties assigned by the instructor. Students taking this course for the first time must have completed PSYS 477 or be currently enrolled in that course. Offered credit/no credit only. No more than 3 credits may be used to meet the requirements of the psychological science major. Prerequisite: PSYS 100; permission of the instructor. Prerequisite or parallel: PSYS 477. A total of 6 credits may be earned, but not more than 3 in any one semester or term.

PSYS 479 - Practical Experience (3 TO 6)
Monitors the progress of students participating in psychology-related settings and assists them in integrating such experiences with acquired knowledge of psychology. No more than 6 credits may be used to meet the requirements of the psychological science major. Prerequisite: PSYS 100, 241, 284, 295; at least 9 credits of PSYS courses with a minimum PSYS GPA of 2.5; junior or senior standing; permission of the instructor. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

PSYS 491 - History of Psychology (3)
Major concepts of various schools of psychological thought and contemporary theoretical systems as they have evolved historically. Prerequisite: PSYS 100; junior or senior standing.

PSYS 492 - Research Seminar (3)
Students conduct research in which they pose and answer one or more meaningful questions about a topic of interest and relevance to them. All students are expected to complete a literature review, to collect and analyze data, and to interpret and publicly report their findings. Prerequisite: PSYS 284 and 285 and a minimum of 12 additional credits in psychology. Open only to psychological science majors with senior status.

PSYS 493 - Teaching of Psychology 1 (1)
Students work with a PSYS 100 instructor to develop curriculum plans, tools for the assessment of learning, and evaluation plans for an introductory psychology course. Prerequisite: 3 courses in the psychology area of the social studies teaching major; permission of the department chairperson. Open only to social studies teaching majors in the psychology area.

PSYS 494 - Teaching of Psychology 2 (2)
Students provide classroom instruction, conduct learning assessments, and conduct a study evaluating learning under the supervision of a PSYS 100 instructor. Prerequisite: PSYS 493; permission of the department chairperson. Open only to social studies teaching majors in the psychology area.

PSYS 495 - Seminar in Psychology (3)
Investigations of topics of interest in the current literature of psychology. Prerequisite: PSYS 100; junior or senior standing. Prerequisite recommended: PSYS 241, 284.
PSYS 496 - International Studies in Psychology (1 TO 12)
International studies in psychological science at approved sites outside the United States. Credit applied to department requirements or electives as approved by the department chairperson. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned.

PSYS 497 - Supervised Empirical Research Experience (1 TO 3)
Experience in the collection of behavioral data in the field or laboratory setting. Students work closely with a supervising faculty member. The credits may be accumulated in more than one semester. No more than 6 credits may be used to meet the requirements of the psychological science major. Offered credit/no credit only. Prerequisite: permission of the instructor. A total of 12 credits may be earned, but no more than 3 in any one semester or term.

PSYS 498 - Independent Study in Psychology (1 TO 3)
Topics for independent study and research to be chosen and investigated in consultation with instructors with special competence in the area involved. The credits may be accumulated in more than one semester. No more than 6 credits may be used to meet the requirements of the psychological science major. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned, but no more than 3 in any one semester or term.

PSYS 499 - Department Honors in Psychology (1 TO 2)
Regular meetings devoted to presentation, discussion, and writing associated with completing departmental honors. This includes active participation in original research completed under the supervision of department faculty. Prerequisite: PSYS 284 and 285; a minimum of 12 additional credits in psychology; permission of the department chairperson. A total of 3 credits may be earned, but no more than 2 in any one semester or term. Open only to psychological science majors with senior status.

RELS - RELIGIOUS STUDIES
RELS 110 - World Religions (3)
Introduces the different religions of the world, examining their origins, beliefs, teachings, and practices. Covers the basics of major religious traditions, including Judaism, Christianity, Islam, Hinduism, and Buddhism, and their place in our global and interconnected world.

RELS 160 - Religion in Culture (3)
Religion is everywhere, but what is it and what does it do? This course introduces religion’s impact on humans and how humans have shaped religious practices in diverse and sometimes surprising ways.

RELS 201 - Religion and Popular Culture (3)
Academic study of multiple relationships between religion and popular culture in a range of media across historical, political, and cultural contexts, especially in their contemporary settings. Examples drawn from sources such as film, music, TV, Internet, video games, sports, comic books, animation, and social media.

RELS 206 - Sex and the Bible (3)
Academic study of biblical literature and the sexual practices contained, described, or interpreted to be within ancient religious materials. Situates the norms and practices for understanding the sexual and biblical materials in a range of historical, literary, political, cultural, and even ethical contexts and effects, especially in their ancient settings and their more recent, continuing uses.

RELS 208 - The Qur'an (3)
The Qur’an is the central scriptural text for Muslims worldwide. But what does it say? And how should we read it? This class will examine how Muslims and non-Muslims use the Qur’an in a range of historical, literary, artistic, cultural, and political contexts.

RELS 210 - Religion, Morality, and Public Debate (3)
Examination of approaches to moral reasoning, the role of religious traditions in forming ethical judgments, and the relationship between moral argument and public debate. Also addresses a range of moral issues that citizens and scholars debate in religious and secular terms.

RELS 250 - Biblical Interpretation (3)
Academic study of biblical literature and of the wide variety of processes for interpreting and understanding this literature given a range of historical, literary, political, and cultural contexts and effects, in their ancient settings and in their historical and continuing interpretations. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

RELS 275 - Islam (3)
Introduces students to topics such as the biography of the Prophet Muhammad, the Qur’an, Sharia law, gender in Islam, Islamic mysticism, Islam and modernity, Islam and violence, and the challenges of studying Islam in the contemporary world.
RELS 280 - Topics in Religions in America (3)
Study of a specific religion and/or religions in their American context, or examination of a theme or a set of social issues in relation to religions in America. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

RELS 285 - Religious Diversity in the United States (3)
Examines critical aspects of religious experiences in the United States, including questions of individual and communal identity, the challenges of religious diversity, and intersections between religion and politics.

RELS 290 - Hinduism (3)
Introduces a variety of Hindu traditions, both in their context of origin and across historical periods and geographical locations. Emphasizes modern Hindu practices, such as temple devotion, pilgrimage, and festivals. Covers many sacred texts and storytelling traditions focused on gods and goddesses, as well as adaptations of Hindu thought and practice in Western contexts.

RELS 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

RELS 340 - Advanced Study of Western Religions (3)
An in-depth investigation of a single Western religious tradition, with attention to sacred texts, historical developments, contemporary issues, and prominent figures. A variable content course that may be repeated for credit with departmental permission. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

RELS 375 - Paul's Letters (3)
Academic study of the most prolific of biblical writers (Paul of Tarsus, or Saint Paul), the letters attributed to him, and the recipients of these letters, through a wide range of approaches in light of the relevant historical, literary, political, and cultural contacts and effects, in both their ancient settings and in their historical and continuing interpretations.

RELS 380 - Religion, Non-Violence and War (3)
Examines religious and secular arguments about non-violence, violence and war, and peacemaking in historical and contemporary contexts. Addresses ethical and political aspects of non-violence and violence in relation to social justice, suffering, and power.

RELS 390 - Buddhism (3)
Examines diverse forms of Buddhist teaching and practice, through history, from Asia to America. Topics include sacred texts, historical developments, prominent figures, and relevance today. Counts for minor in Asian Studies.

RELS 400 - Immersive or Experiential Learning (3)
Students will engage in fieldwork-based research projects on religion. Students will work alone and in teams to design and carry out original studies, combining classroom and field-based, experiential learning. Courses are designed to meet Tier 3 requirements. Prerequisite: junior or senior standing, or permission of instructor.

RELS 403 - Reading and Special Study (1 TO 6)
An opportunity for guided investigation of aspects of religion not covered intensively in available courses. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

RELS 420 - Themes in Religion (3)
A thematically-organized examination of an issue in the study of religion. Some examples: myth, ritual, pilgrimage, religious autobiography, gods and goddesses, asceticism, "texts" in contexts, or religion and cultural studies. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

RELS 450 - Critical Issues in the Study of Religion (3)
Advanced study of a select issue of importance in the study of religion and culture, e.g. women and religion, religion and politics, religion and ethics. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

RELS 470 - Perspectives on Religion (3)
A critical analysis of aspects of one or more religious traditions through one or more distinctive methodological perspectives, such as anthropological, sociological, psychological, historical, or philosophical. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

RE - REAL ESTATE
RE 230 - Real Estate Principles (3)
Economic import of real estate, real estate characteristics, land-use and environmental controls, legal concerns of real estate, methods of valuation, mortgage credit sources, secondary mortgage markets and financing techniques, investment analysis, land development, and real estate
operations. Prerequisite: completion of general studies math requirement or permission of the instructor.

**RE 331 - Real Estate Construction Law and Finance (3)**
The financial and legal implication of the contracts used in real estate construction and development. Examines contracts, techniques, and strategies in the construction and financing of real estate development projects and the role of banks, bonding, and mortgage markets. Gives students an introduction to real estate law and finance important to real estate construction and development projects. Not open to students who have credit in CM 420.

**RMI - RISK MGT & INSURANCE**

**RMI 270 - Principles of Risk Management and Insurance (3)**
An analysis of the risk management process, individual and business property and liability loss exposures, social insurance programs, and effective use of financial planning products such as pension plans and life, health, and disability insurance.

**RMI 330 - Employee Benefits and Retirement Planning (3)**
Examines individual and group life, health, and disability insurance, annuities, employee benefit plans, retirement plans, and social insurance programs. Prerequisite: RMI 270.

**RMI 369 - Internship in Risk Management and Insurance (3 TO 6)**
Professional practice during the summer or semester as an intern in an approved program in risk management or insurance under the supervision of the risk management and insurance faculty. Prerequisite: permission of the risk management and insurance faculty. A total of 6 credits may be earned.

**RMI 377 - Operations of Insurance Enterprises (3)**
The study of insurance companies, including surplus lines organizations, in areas such as pricing, underwriting, reinsurance, distribution, and loss control. Prerequisite: RMI 270.

**RMI 378 - Commercial Risk Management and Insurance (3)**
A study of appropriate risk control techniques, noninsurance risk transfer techniques, and insurance as tools of risk management for commercial property, liability, marine, auto, and workers compensation exposures. Prerequisite: RMI 270.

**RMI 401 - Health Care Risk Management (3)**
Focuses on concepts and principles of health care risk management. Current trends and issues in managing health care risks will be examined. Prerequisite: RMI 270 or permission of the department chairperson.

**RMI 473 - Insurance Law (3)**
The law as it is applied to the insurance industry emphasizing the law of torts as the foundation of the insurer's liability, the law of contracts and agency as applied to the policy, and government regulation of insurance. Prerequisite: RMI 270; BL 260.

**RMI 474 - Corporate Risk Management (3)**
Examines corporate risk management, the application of the risk management process to organizations, and other topics related to the industry. Prerequisite: RMI 378.

**RMI 497 - Independent Study in Risk Management and Insurance (1 TO 6)**
Designed for academically qualified students who want to study some phase of risk management and insurance. An individualized program of reading, research, or analyzing various risk management and insurance topics under the guidance of a faculty member. Prerequisite: permission of the RMI faculty. A total of 6 credits may be earned.

**SCI - SCIENCE**

**SCI 150 - Introduction to Teaching Science in Secondary Schools (3)**
An introduction to the process of becoming a science teacher in secondary schools. Through coursework and targeted clinical experiences, teacher candidates will begin to form their professional identities as future educators, develop a beginning knowledge base for teaching, and engage with the integration of technology throughout the learning process. They will also observe, develop, and demonstrate initial core teaching practices. Open only to Secondary Science teaching majors (all science license areas).

**SCI 295 - Introduction to the Teaching of Science (3)**
Philosophy and methodology of teaching science. Emphasizes the nature of science as a human endeavor, the national goal of scientific literacy for all, and the pedagogical strategies which enhance science concept acquisition. Lesson planning within the context of field experiences where appropriate. Prerequisite: sophomore standing; at least 24 credits of science content courses; pass Decision Point 1. Open only to science teaching majors.
SCI 392 - Teaching of Science in the Junior High School (3)
Recent curriculum developments in junior high school science. Science curriculum instruction related to the physical, mental, and emotional characteristics of the junior high school student. Experiences in public schools may be required. Prerequisite: 24 credits of science courses or permission of the department chairperson.

SCI 396 - Using Science Methods and Materials (3)
Methods and materials used in teaching secondary science. Designing activities for laboratory and field work, maintaining safety guidelines, and incorporating computers and electronic technology into data collection and analysis. Textbook collection, equipment inventories, and teaching on a science budget. Prerequisite: SCI 295. Open only to teaching majors in chemistry, life science, physical science, and earth/space science.

SCI 397 - Teaching Science in the Elementary School (3)
Methods for teaching science concepts, skills, and attitudes are developed through classroom and clinical experiences. Special emphasis on making connections between science and other areas of the elementary curriculum. Prerequisite: 8 credits of science or permission of the department chairperson.

SCI 398 - Teaching Science in the Early and Primary Grades (3)
Analysis of the cognitive, psychomotor, and affective processes inherent in science investigations for young children. Classroom and clinical experience using hands-on activities with science materials appropriate for preschool and primary children. Designed for early childhood education programs. Prerequisite: 8 credits of science or permission of the department chairperson.

SCI 498 - Science as Inquiry (3)
An integrated look at the scientific enterprise and the investigative process that drives it. Focuses on the development and use of cognitive and manipulative skills used to think scientifically about matters of personal interest in everyday life. Prerequisite: BIO 102; GEOG 101 or GEOL 101; PHYC 101; permission of the instructor. Open only to elementary education majors with the science concentration.

SNLN - SIGN LANGUAGE
SNLN 251 - American Sign Language 1 (3)
Introduction to sign language systems including fingerspelling and American Sign Language (ASL). Development of receptive and expressive skills in sign language is emphasized. Prerequisite: permission of the department chairperson.

SNLN 252 - American Sign Language 2 (3)
Designed to improve conversational skills in American Sign Language to a functional level for expressive and receptive use in education and other settings. Introduction to issues related to deaf culture. Prerequisite: SNLN 251; permission of the department chairperson.

SNLN 253 - American Sign Language 3 (3)
Emphasizes the development of conversational skills in American Sign Language and stresses vocabulary building and interpretation of culturally related cues. Prerequisite: SNLN 252; permission of the department chairperson.

SNLN 254 - American Sign Language 4 (3)
Advanced development of American Sign Language fluency in occupational and professional settings. Special emphasis is placed on dialects and related deaf-cultural issues. Expansion of ASL vocabulary is also emphasized. Prerequisite: SNLN 253 and permission of the department chairperson.

SNLN 300 - Structure of American Sign Language (3)
Provides targeted development to advance student’s skills in fingerspelled word recognition, numbering, classifiers and American Sign Language (ASL) grammar. Practice in specific skills that underlie the fingerspelled word recognition process, and practice in correctly recognizing fingerspelled words and numbers in context. In addition to receptive skill development, students will hone their articulation and production of fingerspelling, numbering, classifiers and grammar. Prerequisite: SNLN 251 or 252 with a grade of C or better.

SOC - SOCIOLOGY
SOC 100 - Principles of Sociology (3)
An introduction to sociology. Gives an understanding of theories and research on social structures, processes, and problems. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1060)

SOC 200 - Sociological Thinking (1)
Designed to provide students with a deeper understanding of how sociologists approach the world including how they think, ask questions, and ultimately take action. Focuses on promoting sociological thinking, demonstrating the discipline's relevance for social and community issues, and illustrating potential career opportunities within the field. Prerequisite: SOC 100 or permission of the instructor.
SOC 221 - Introduction to Race and Ethnic Relations (3)
An exploration of social organization of racial and ethnic minority life in the United States. Particular emphasis placed on the theories and research related to patterns and outcomes of social interaction and diversity.

SOC 224 - Family and Society (3)
Introductory analysis of the interrelationship between family and society. Examines family within a historical, structural, and cultural context with an emphasis on demography, stratification, race/ethnicity, and power dynamics.

SOC 227 - Spirituality, Self, and Society (3)
Introduces the sociological study of spirituality. Uses sociological methods and theories to examine a range of spiritual expression, emphasizing individual experiences, changing spiritual landscapes, and the intersection of spirituality with social institutions. Prerequisite: SOC 100 or permission of the instructor.

SOC 235 - Sociology of Gender (3)
Examines women's and men's roles in society. Explores how gender intersects with a variety of social institutions including: race, class, religion, the economy, and politics.

SOC 242 - Social Problems (3)
Discussion and analysis of current social problems within American society. Examines political, economic, and social dimensions of problems, their causes, and possible solutions. Core Transfer Library: Behavioral Sciences/Humanities (ISH 1061)

SOC 260 - Social Interaction (3)
Analysis of the interaction between people and their social environment. Examines the effects of groups and society on individuals.

SOC 299X - Topics in Sociology (3)
Topics relevant to the discipline. Course titles will be announced before each semester. Students may not repeat topics for additional credit. Prerequisite: SOC 100 or permission of the instructor.

SOC 312 - Leisure (3)
Focuses on recreation, hobbies, media consumption, sports, folk arts, high culture, travel, and leisure industries. Quality of life issues and effects on the natural environment are also discussed. Prerequisite: SOC 100 or permission of the instructor.

SOC 320 - Social Inequality (3)
Examines causes and consequences of social class, status, and mobility in the United States and other countries. Prerequisite: SOC 100 or permission of the instructor.

SOC 328 - Globalization and the Social World (3)
Examines the process of globalization especially as it occurs in countries with emerging economies. Social problems, social change models, and ideologies related to globalization are also discussed.

SOC 329 - Work and Society (3)
Examines work organization in historical and contemporary societies. Prerequisite: SOC 100 or permission of the instructor.

SOC 333 - Sociology of Media (3)
Describes, compares, and analyzes national and international media from a sociological perspective. Representations of race, class, and gender will also be explored emphasizing the development of media literacy. Prerequisite: SOC 100 or permission of the instructor.

SOC 341 - Sociology of Health and Illness (3)
Analysis of relationships between diseases and the social structure and efforts to cope with sickness. Topics include social factors in the distribution of disease, social stress, the sick role, conventional and alternative healers, and the medical-care system. Prerequisite: SOC 100 or permission of the instructor.

SOC 343 - Deviance (3)
Overview of theory and research on deviance.

SOC 355 - Environmental Sociology (3)
Addresses the role of social structures as cause, impediment, and solution to environmental and sustainability issues.

SOC 369 - Internship Experience - Paid (3)
Paid supervised field experience in a business, industrial, governmental, educational, or other setting. Supervision will be jointly provided by sociology faculty and employers. Students may earn up to 6 credits total from internships SOC 369 and 488. Prerequisite: permission of sociology internship coordinator and the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.
SOC 380 - Sociological Research Methods (3)
Examines the basic principles of conducting and analyzing sociological research. Prerequisite: SOC 100 or permission of the instructor.

SOC 382 - Applied Social Statistics (3)
Calculation, application, and interpretation of statistics used in social and behavioral sciences. Prerequisite: SOC 100 or permission of the instructor.

SOC 390 - Honors Colloquium in General Sociology (3)
Designed to acquaint honors students with sociological perspectives on a wide variety of social issues. Prerequisite: junior standing in the Honors College.

SOC 402 - Sociological Theory (3)
Focuses upon sociological theories of the nineteenth and twentieth centuries. Modern society, contemporary events, and probable future trends are examined in terms of major sociological theories. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 421 - Racial and Cultural Minorities in the United States (3)
Examines the causes and consequences of prejudice and discrimination toward minority groups in America. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 422 - Analysis of Social Inequality and Social Trends (3)
Quantitative analysis of social inequality and social trends in contemporary society. Prerequisite: SOC 100, 382 or equivalent, plus 3 SOC credits, or permission of the instructor.

SOC 424 - Family (3)
Advanced topics in the sociology of the family. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 425 - Sociology of Law (3)
Provides a sociological understanding of law. Specifically focuses on the reciprocal relationship between law and the social world. Uses sociological theory to help recognize, evaluate, and appreciate law in society. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 427 - Sociology of Religions (3)
An analysis of religion as a social institution. Special consideration of religious conversion, religious conflict, fundamentalism, secularization, the formation of sects and cults, and the relationship of religion and gender, race, and politics. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 431 - Aging and the Life Course (3)
Examines the effects of social and cultural factors on the aging process including an analysis of policies and programs designed to meet the needs of older adults. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 433 - Sociology of Mental Health (3)
Mental disorders and their definition, prevalence, and distribution. Also includes analysis of help-seeking behaviors, the experience of treatment, the psychiatric industry, and the insanity plea. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 441 - Social Change (3)
Analyzes social movements and resistance to these movements. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 450 - Sociology of Education (3)
Focuses on current theory and research in the sociology of education. Topics include the role of education in stratification, cross-cultural comparisons of educational systems, and the organization and culture of schools. (May not be used as a substitute for EDFO 420.) Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOC 470 - Population Dynamics and Demographic Methods (3)
Investigation of historical and contemporary demographic patterns and their implications for the future. Use of demographic methods to analyze composition, distribution, and growth of human populations. Prerequisite: SOC 100 and 6 SOC credits, or permission of the instructor.

SOC 472 - Urban Dynamics and Problems (3)
Functions and institutional dynamics of the city with special reference to contemporary urban problems. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.
SOC 488 - Internship Experience - Unpaid (3)
Unpaid supervised field experience in a business, industrial, governmental, educational, or other setting. Supervision will be jointly provided by sociology faculty and employers. May earn up to 6 credits total from internships SOC 369 and 488. Prerequisite: permission of sociology internship coordinator and the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

SOC 490 - Independent Study of Sociology (1 TO 3)
Provides opportunities to conduct sociological investigations supervised by instructors who possess expertise in the subjects involved. Prerequisite: SOC 100 plus 6 SOC credits; permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

SOC 492 - Capstone Course in Sociology (3)
Capstone study expanding the scope of the undergraduate education via immersive learning experience. Prerequisite: SOC 200, 380, 382; permission of the department chairperson. Prerequisite or parallel: SOC 402. Open only to sociology majors with GPA of 2.5 or greater in the major or senior standing.

SOC 499 - Advanced Topics in Sociology (3)
Explores advanced topics relevant to the discipline. Topics will be announced before each semester. Students may not repeat topics for additional credit. Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

SOCW - SOCIAL WORK

SOCW 100 - Introduction to Social Work (3)
Introduces entry-level generalist social work practice. Focuses on the history, purposes, values, and role of the social worker within the social welfare services delivery system.

SOCW 200 - Social Work Practice 1 with Field Experience (3)
Focuses on fundamental communication and relational skills used by entry-level generalist social work practitioners. Concurrent field experience required. Prerequisite: SOCW 100; or permission of the department chairperson. Open only to social work majors and minors and family life educator certification candidates.

SOCW 220 - Social Welfare Policy 1 (3)
Introduces the historical development, mission, and philosophy of social welfare in the United States with a focus on the analysis of current social welfare programs. Focuses on economic, religious, political, and other sociocultural influences on contemporary welfare policies and services. Prerequisite: SOCW 100; or permission of the department chairperson. Open only to social work majors and minors and family life educator certification candidates.

SOCW 250 - Human Behavior and the Social Environment 1 (3)
Focuses on human growth and development from the prenatal period through later adulthood. Biological, psychological, and social aspects of human behavior are discussed. The complex interaction between human development and various social, cultural, spiritual, familial, organizational, and community factors are highlighted. Emphasizes applying concepts and theories to assessment. Prerequisite: SOCW 100 or permission of the department chairperson. Open only to social work majors and minors, and women and gender studies majors and minors.

SOCW 300 - Social Work Practice 2 (3)
Introduces methods, knowledge, professional values, and competencies used in entry-level social work practice with groups. Concurrent field experience required. Prerequisite: PSYS 100; SOCW 200 and 220 and 250; or permission of the department chairperson. Open only to social work majors.

SOCW 310 - Social Welfare Policy and Programs 2 (3)
Emphasizes policy formation and program development, implementation and evaluation used by entry-level social work practitioners. Prerequisite: SOCW 200 and 220 and 250; or permission of the department chairperson. Open only to social work majors.

SOCW 320 - Social Welfare Policy and Programs 3 (3)
Builds a foundational understanding of people and their social environments focusing primarily on factors that influence human behavior such as culture, class, race, ethnicity, sexual orientation, gender identity, gender, discrimination, economic forces, organizations, and communities. Covers theories and knowledge about the ways social systems promote or deter people in maintaining or achieving health and well-being. Prerequisite: SOCW 200 and 220 and 250; PSYS 100. Prerequisite or parallel: PSYS 367 or BIO 254; or permission of the department chairperson (PSYS 367 or BIO 254 waived for minors, family and consumer science - family and child: family studies concentration students, and women and gender studies majors and minors). Open only to social work majors and minors, family and consumer science - family and child: family studies...
concentration students, and women and gender studies majors and minors.

**SOCW 340 - Research in Social Work 1 (3)**
Introduces qualitative and quantitative research methods, knowledge, and skills used by a Bachelor of Social Work degreed practitioner to evaluate practice effectiveness. Focuses upon the importance of research ethics in protecting human subjects. Prerequisite: SOCW 200 and 250; or permission of the department chairperson. Open only to social work majors.

**SOCW 370 - Selected Aspects of Social Work Practice (3 TO 6)**
Explores social work practice with selected populations and within specific fields of practice. Prerequisite: SOCW 100 and 200 and 220 and 250; or permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term. Open only to social work majors.

**SOCW 410 - Social Work Practice 3 (3)**
Introduces methods, knowledge, professional values, and competencies for entry-level practice with individuals and families. Focuses on practice methods of assessment, intervention planning and implementation, and evaluation. Concurrent field experience required. Prerequisite: SOCW 310 and 320 and 325 and 340; or permission of the department chairperson. Prerequisite recommended: ANTH 311 or COMM 290 or EDMU 205 or SOC 421; ANTH 441 or PSYS 324 or SOC 235 or WGS 210. Open only to social work majors.

**SOCW 430 - Social Work Practice 4 with Field Experience (3)**
Introduces entry-level practice methods with organizations and communities. Practice methods of engagement, assessment, intervention planning and implementation, and evaluation. Concurrent field experience required. Prerequisite: SOCW 310 and 320 and 325 and 340; or permission of the department chairperson. Prerequisite recommended: ANTH 311 or COMM 290 or EDMU 205 or SOC 421; ANTH 441 or PSYS 324 or SOC 235 or WGS 210. Open only to social work majors.

**SOCW 440 - Research in Social Work 2 (3)**
Focuses upon statistical measurement and data analysis used by a Bachelor of Social Work degreed practitioner to evaluate practice and program effectiveness. Introduces basic concepts of descriptive and inferential statistics, data entry, and analysis using SPSS. Prerequisite: MATH 125 and SOCW 340; or permission of the department chairperson. Open only to social work majors.

**SOCW 460 - Social Work Practicum (12)**
Full-time practicum in an approved field instruction site that provides structured learning opportunities to demonstrate baccalaureate-level social work foundation knowledge, professional standards, and practice competencies required of an entry-level generalist social worker. Prerequisite: SOCW 410 and 430 and 440; ANTH 311 or COMM 290 or EDMU 205 or SOC 421; ANTH 241 or PSYS 324 or SOC 235 or WGS 210; or permission of the department chairperson. Open only to social work majors.

**SOCW 462 - Social Work Practicum Seminar (3)**
Focuses on the integration of entry-level generalist social work practice knowledge, professional ethical standards, and competencies; analyzes applied generalist practice settings and interventions using assignments based on the concurrent field experiences in SOCW 460; and emphasizes ongoing professional development. Prerequisite: SOCW 410 and 430 and 440; ANTH 311 or COMM 290 or EDMU 205 or SOC 421; ANTH 241 or PSYS 324 or SOC 235 or WGS 210; or permission of the department chairperson. Open only to social work majors.

**SOCW 490 - Independent Study in Social Work (1 TO 12)**
Topic to be chosen and investigated in consultation with an instructor with special competence in the subject involved. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term. Open only to Social Work majors.

**SPAA - SPEECH PATH & AUDIO**

**SPAA 100 - Survey of Speech-Language Pathology and Audiology (2)**
Introduction to speech-language pathology and audiology and a survey of communication disorders. Particularly helpful for persons thinking about careers in communication disorders or in related fields (teaching, nursing, gerontology, etc.).

**SPAA 101 - Clinical Phonetics (3)**
Study of International Phonetic Alphabet as applied to communication disorders. Production of speech sounds in English along with transcription of normal speech. Relationship of transcription and analysis to communication disorders.
SPAA 161 - Anatomy and Physiology of Speech and Hearing (3)
Study of the anatomy and physiology of the speech and hearing mechanisms. Includes respiration, phonation, articulation, resonance, hearing, and swallowing.

SPAA 210 - Speech Sound Disorders (3)
Overview of articulation and phonological system development and the nature of speech sound disorders. Includes phonetic transcription and analysis of normal and disordered speech samples and standardized testing results. Introduction to principles of treatment planning for remediation of speech sound disorders. Prerequisite: SPAA 101.

SPAA 260 - Speech Acoustics (3)
Introduction to the physical nature of speech and its relationship to speech production and perception. Prerequisite: SPAA 101.

SPAA 270 - Language Development (3)

SPAA 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.

SPAA 311 - Clinical Procedures and Observations (3)
Methods course to prepare speech-language pathology and audiology students for clinical practicum. Overview of professional, ethical, diagnostic, and therapy topics. Observation of therapy is required. Prerequisite: permission of the department chairperson. Parallel: SPAA 312. Open only to approved clinical SPAA majors.

SPAA 312 - Introduction to Diagnosis and Appraisal (3)
Techniques in the diagnosis of speech and language disorders. Recognizing and understanding the components of differential diagnosis. Practice in administration and interpretation of selected tests. Prerequisite: SPAA 101, 210; permission of the department chairperson. Parallel: SPAA 311 or permission of the department chairperson. Open only to approved clinical SPAA majors.

SPAA 342 - Audiology for Deaf Education (3)
Overview of audiology and aural rehabilitation for deaf education majors. Prerequisite: SPAA 101; SPCE 240. Open only to deaf education majors or with permission of the department chairperson.

SPAA 343 - Introduction to Audiology (3)
Overview of the anatomy and physiology of hearing, hearing disorders, hearing assessment, and hearing screening. Prerequisite: SPAA 161 or ANAT 201.

SPAA 344 - Aural Rehabilitation (3)
Overview of aural rehabilitation. Practical implications of various types of hearing losses and appropriate rehabilitative procedures. Amplification, auditory training, speechreading, educational and vocational considerations, and psychosocial implications of hearing loss. Prerequisite: SPAA 270 and 343.

SPAA 345 - Clinical Audiology: Orientation and Visitation (3)
Orientation to the practice of clinical audiology in various settings and work environments. Prerequisite: SPAA 260 and 343 and 344. Open only to preaudiology preparation majors.

SPAA 361 - Neuroanatomy and Neurophysiology of Speech, Language, and Hearing (3)
Overview of neuroanatomy and neurophysiology with a concentration on neurological mechanisms related to speech, language, and hearing. Prerequisite: SPAA 161.

SPAA 371 - Child Language Disorders 1 (3)
Introduction to the nature, cause, and treatment of language disorders in children. Prerequisite: SPAA 270.

SPAA 414 - Stuttering 1: Research and Theory (3)
An introduction to the disorder of stuttering with attention directed to its symptoms and development. Reviews the research and theoretical formulations regarding stuttering and its treatment. Prerequisite: SPAA 210.

SPAA 418 - Neurogenic and Organic Speech and Language Disorders (3)
An overview of speech and language disorders resulting from neurogenic and organic etiologies. Topics covered include: stroke, brain injury, dementia, neurodegenerative diseases, cleft palate, functional voice disorders and dysphagia. Prerequisite: SPAA 161 and 361.
SPAA 419 - Clinical Practicum (3)
Clinical practicum in speech-language pathology and audiology/aural rehabilitation. Students perform observations and provide supervised clinical services for persons with various communication disorders. Prerequisite: SPAA 101 and 210 and 270 and 311 and 312 and 371. Open only to approved clinical SPAA majors.

SPAA 420 - Orientation and Clinical Practicum in School Settings (2)
Orientation and clinical practicum in speech-language pathology and audiology/aural rehabilitation in school settings. Prerequisite: SPAA 419; permission of the department chairperson. Open only to approved clinical SPAA majors on a credit/no credit basis.

SPAA 492 - Directed Study in Speech-Language Pathology and Audiology (1 TO 3)
Individual directed study in speech-language pathology and audiology. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

SPCE - SPECIAL EDUCATION

SPCE 200 - Exceptional Children and Adults (3)
Specifically for non-special education majors and offers an introduction to the foundation, terminology, identification, and issues commonly encountered when addressing the needs of diverse individuals with exceptional needs. Examines federal and state legal mandates for the provisions of special education and interventions including nondiscriminatory assessments, parental involvement, and individualized educational plans with an emphasis on diversity issues. Addresses the collaborative roles of a multidisciplinary approach to supporting children and youth with disabilities in a diverse society. Not open to students who have credit in SPCE 201.

SPCE 201 - Introduction to Students With Exceptional Needs (3)
An introduction to definitions, characteristics, and education of students with exceptional needs. Examines federal and state legal bases for the provision of special interventions, and provides a general introduction to the field of special education.

SPCE 202 - Legal and Procedural Foundations of Special Education (3)
Studies court cases, federal- and state-level legislation, and related historical events that preceded passage of IDEA. Covers definitions, procedural requirements, and legal safeguards of IDEA as implemented in Indiana. Prerequisite: SPCE 201 with a minimum grade of C.

SPCE 210 - Theory and Practices in Early Childhood Special Education (3)
Examines the sociological, political, historical, and educational perspectives related to education of infants, toddlers, and preschoolers with exceptional needs, and their families. Prerequisite: SPCE 200 or 201 or 302 with a grade of C or better.

SPCE 215 - Assessment of Young Children With Exceptional Needs (3)
Procedures for assessing young children with exceptional needs, infancy through age six. Use of observational techniques and formal and informal assessment methodology will be investigated. Parallel: SPCE 210.

SPCE 240 - Introduction to Sign Systems, Educational Environments, and Services (3)
Introduces a variety of sign systems (cued speech, visual phonics, Signed Exact English, and others), educational environments and services across the continuum provided to deaf/hard of hearing individuals. These will be discussed through different philosophical and historical perspectives. Prerequisite: SPCE 200 or 201 (SPCE 201 for deaf and special education majors only).

SPCE 246 - Speech Development and Technology for Deaf and Hard of Hearing Individuals (3)
Serves to provide a basic introduction to the development of speech and hearing and technology used to support speech and hearing for deaf/hard of hearing individuals. Includes the knowledge, theories, and foundation for understanding speech development, hearing, and technology. Prerequisite: SPCE 200 or 201 (SPCE 201 for deaf and special education majors only).

SPCE 248 - Practicum with Students who are Deaf or Hard of Hearing (3)
Includes work with deaf/hard of hearing students from various age ranges. Participants will practice planning, writing, and implementing relevant instructional objectives using specialized technology, resources, and instructional strategies unique to individuals who are deaf or hard of hearing. Prerequisite: SPCE 246 or permission of the department chairperson.

SPCE 266 - Classroom Management (3)
Provides an overview of classroom management issues and interventions. Includes observations and participation in settings that include students with exceptionalities. On-campus class and field experience. Prerequisite: SPCE 201 with a grade of C or better.
SPCE 277 - Human Relations, Collaboration, and Diversity (3)
Examines diversity in the classroom and focuses on collaboration with parents of learners with exceptionalities and professionals as members of the multidisciplinary team. Emphasizes co-teaching and related collaborative instructional strategies. Prerequisite: SPCE 201 with a grade of C or better.

SPCE 280 - Behavior Analysis: Principles, Procedures, and Philosophy (3)
Focuses on the philosophical assumptions of behavior analysis and introduces the basic principles and procedures of behavior analysis. Behavioral service delivery within education and health service settings also are emphasized.

SPCE 290 - Introduction to Autism Spectrum Disorders (3)
Focuses on understanding autism spectrum disorders through the life span. Diagnostic criteria and differentiation from other developmental disorders is emphasized. Identification, assessment, and treatment of individuals with autism spectrum disorders are reviewed.

SPCE 291 - Social Services in the Deaf Community (3)
Major concepts and issues in the field of deafness and the Deaf community as current trends and issues are explored as they related to social services and working with deaf/hard of hearing individuals. Resources will be explored for different field and areas of study as they related to deaf/hard of hearing individuals and their families.

SPCE 292 - Treatment and Interventions for Autism Spectrum Disorders (3)
Introduces students to key concepts essential in implementing interventions for individuals with autism spectrum disorders (ASD). The wide variety of interventions and treatments used with individuals with ASD are reviewed. Theoretical foundations, educational practices, and family factors that influence interventions are discussed. Prerequisite: C or better in SPCE 290.

SPCE 299X - Experimental/Developmental Topics (3 TO 6)
Topics relevant to the discipline. Topics will be announced before each semester. A total of 6 credits may be earned.

SPCE 300 - Independent Study (1 TO 6)
Designed to meet the needs of students who wish to conduct independent study, field work, or research in special education. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

SPCE 302 - Teaching Students with Disabilities in the General Education Classroom (3)
Designed for general educators, introduces special education concepts and procedures. Topics include legal mandates and considerations, overview of educational needs of students with disabilities, Individual Education Plans and case conferences, collaborating with special education teachers and related service professionals, and curricula adaptations. Not open to students who have credit in SPCE 201.

SPCE 307 - Ethical and Professional Practice in Behavior Analysis (3)
Address issues relevant to the ethical and professional practice of behavior analysis. Emphasis is placed on ethical considerations related to assessment, data collection, and implementation of behavioral treatments. Prerequisite: SPCE 280 or concurrent enrollment.

SPCE 309 - Principles of Applied Behavior Analysis for Special Education (3)
Introduction to the basic principles of applied behavior analysis for classroom applications. Strategies for classroom management and for promoting conducive learning environments are emphasized.

SPCE 310 - Application and Consultation in Applied Behavior Analysis (3)
Will provide a framework for the natural science of behavior. Students will learn how to collect and interpret different types of data, and the importance of making data-driven decisions for behavior change procedures. Will also include practical application in which students will implement data collection and analysis procedures to prepare them for behavioral consultation. Prerequisite: C or better in SPCE 280.

SPCE 311 - Developmental Methods for Infants and Toddlers with Exceptional Needs (3)
Examines developmental strategies, and curricular practices for serving infants, toddlers with exceptional needs, and their families. Current research and best practices will be disseminated throughout. Prerequisite: SPCE 215 with a grade of C or better; admission to the teacher education program.

SPCE 312 - Developmental Methods for Preschool Children with Exceptional Needs (3)
Examines instructional methodology and curricular practices for serving preschoolers with exceptional needs and their families. Research and best practices are
emphasized. Prerequisite: SPCE 215 with a grade of C or better; admission to the teacher education program.

SPCE 315 - Advanced Behavior Analysis (3)
Advanced concepts of behavior analysis are covered. Students also are expected to demonstrate their application of behavioral concepts through the development and implementation of behavioral interventions with individuals within the educational setting, health service setting, or both. Prerequisite: C or better in SPCE 280 and 307 and 310.

SPCE 316 - Single Subject Research Design and Applications (3)
Designed to develop the knowledge and skills needed to develop, implement, and evaluate behavioral interventions using single-subject design in practice and research. Prerequisite: grade of C or better in SPCE 307 and 310.

SPCE 320 - Advanced Interventions for Autism Spectrum Disorders (3)
In-depth analysis of evidence-based interventions used with individuals with autism spectrum disorders is provided. Strong emphasis is placed on utilizing research to support, develop, and implement interventions. Prerequisite: C or better in SPCE 292.

SPCE 321 - Educational and Rehabilitation Strategies for Deaf and Hard of Hearing (3)
Strategies and methods that are used for promoting oral/aural rehabilitation within deaf education will be presented. From the knowledge of development of speech and hearing and technology, students will use critical thinking to construct objectives, activities, and materials for deaf/hard of hearing students. Prerequisite: SPCE 246.

SPCE 322 - Deaf People and Civil Rights (3)
Explores aspects of life in the Deaf community including cultural identity, education, language, the medical perspective, advocacy, audiology, and oppression as they relate to civil rights and disability law. The concepts will be explored through different lenses as students consider the development of the laws and human rights with a focus on languages and linguistic minorities.

SPCE 323 - Deaf Culture: A Global Perspective (3)
Designed to encompass all the skills and knowledge necessary to think critically about topics related to signed languages and their users globally. Inquiry into American Deaf culture and the cultures of other global Deaf communities will expand one’s critical understanding of how these minority cultures function and thrive within broader society.

SPCE 324 - Deaf Community in the Modern World: Current Issues (3)
Considers current events related to the Deaf community. Topics will include demographics of deafness; factors affecting an individual’s choice to affiliate with the Deaf community; current linguistic and cultural oppression; economic, legal, and social implications of deafness; diversity within the Deaf community; deafness in literature, media and the effects of arts and technology’s effect on Deaf culture.

SPCE 325 - Deaf and Hard of Hearing Students with Multiple Disabilities (3)
Considers the individual needs of deaf students with multiple disabilities in the context that guides much of deaf education. Issues related to placement and curriculum options for deaf students with multiple disabilities will be analyzed. Explores the effectiveness of person-centered planning for deaf students with multiple disabilities.

SPCE 331 - Technology in Education (1 TO 3)
Introduction to computer applications in special education, including building personal computer skills, applying those skills in the classroom, customizing curriculum, and adapting a variety of technologies for learners with special needs. A total of 3 credits may be earned.

SPCE 332 - Introduction of Behavior Disorders (3)
Introduction to the history of educating children with behavior disorders; the problems of defining, assessing, and treating behavior disorders; and types and causes of disordered behavior. Prerequisite: SPCE 201 or 302 with a grade of C or better; admission to the teacher education program.

SPCE 334 - Topics in Autism (3)
Provides an overview of autism spectrum disorders. The etiology, characteristics, and diagnostic criteria of autism spectrum disorders are reviewed. Also explores the environmental, genetic, and neuropsychological contributing factors of autism. Autism, high functioning autism, Asperger's disorder, and pervasive developmental disorders are discussed. A total of 9 credits may be earned, but no more than 3 in any one semester or term.

SPCE 336 - Educating Secondary Students with Behavior Disorders (3)
Educational assessments, methods, materials, and programs for seriously emotionally disabled youth. For future teachers of students with behavior disorders. Prerequisite: SPCE 332, 334, or permission of department chairperson.
SPCE 361 - Advanced Practicum in Special Education (1 TO 6)
Field experience emphasizing application of teaching methodologies and best practices in instruction and classroom management. Projects associated with the methods course (see parallel course) will be completed. Prerequisite: admission to the teacher education program; and SPCE 375 with a C or better; and overall GPA of 3.0 or better. Parallel: SPCE 366 or 376 or 378 or 454 or 476. A total of 6 credits may be earned.

SPCE 362 - Advanced Practicum Severe Disabilities (3)
An advanced practicum emphasizing the application of assessment and teaching methodologies for students with moderate to severe disabilities in classroom and related settings. Projects associated with SPCE 378 will be completed. Prerequisite: SPCE 201, 202, 266, 377 with grades of C or better; admission to the teacher education program; passing scores on the CASA; 3.0 overall GPA; permission of the department chairperson. Parallel: SPCE 378. A total of 9 credits may be earned, but no more than 3 in any one semester or term. Open only to students majoring in exceptional needs: intense interventions.

SPCE 363 - Advanced Practicum Physical Impairments (3)
An advanced practicum emphasizing the application of assessment and teaching methodologies for students with physical, sensory, health impairments and multiple disabilities in classroom and related settings. Projects associated with SPCE 379 will be completed. Prerequisite: SPCE 201, 202, 266, 366 with grades of C or better; admission to the teacher education program; passing scores on the CASA; 3.0 overall GPA; permission of the department chairperson. A total of 9 credits may be earned, but no more than 3 in any one semester or term. Open only to students majoring in exceptional needs: intense interventions.

SPCE 366 - Introduction to Persons with Physical Disabilities and Other Health Care Needs (3)
Designed for future teachers and rehabilitation counselors of persons with physical, sensory, or health impairments. Etiology, physical and social-emotional characteristics, and educational considerations and implications are emphasized within a transdisciplinary habilitative/rehabilitative team perspective. Prerequisite: admission to the teacher education program; passing scores on the CASA; 3.0 overall grade-point average; grades of C or better in SPCE 201 (SPCE 302 for elementary education and secondary content area program) and 202.

SPCE 371 - Introduction to Mild Interventions (3)
The study of the psychological, environmental, behavioral, and cultural factors that contribute to mild disabilities. Foundations of special education are reviewed. Includes legal responsibilities of schools, eligibility, evidence-based practices, Universal Design for Learning (UDL), and Individual Educational Programs (IEP). Prerequisite: admission to the teacher education program.

SPCE 372 - Introduction to Mental Retardation (3)
Studies various types and degrees of retardation; the psychological, environmental, and cultural conditions that contribute to retardation. Emphasizes etiology, assessment, and issues. Prerequisite: SPCE 201 or 302 or permission of the department chairperson.

SPCE 375 - Assessment in Special Education, Including Response to Intervention (3)
Educational assessment skills needed in the role of a teacher of students with exceptionalities. Emphasis on the accurate administration, scoring, and interpretation of selected assessment tools. Application of concepts related to Early Intervening Services (Response to Intervention) is also included. Role of the special educator on the multidisciplinary assessment team is explored. May be repeated only one time. Prerequisite: EDPS 345 for all-grade mild and intense intervention majors; and admission to the teacher education program; and grade of C or better in SPCE 371.

SPCE 376 - Teaching Methods in Mild Interventions K-12 (3)
Studies best practices in differentiation, engaging learners, developing and teaching a unit, and teaching language arts. Prerequisite: admission to the teacher education program; and SPCE 375 with a C or better; and overall GPA of 3.0 or better. Parallel: SPCE 361.

SPCE 377 - Educating Children and Youth with Severe Disabilities (3)
Introduces future teachers to students who require severe interventions. Contemporary best practices and standards in integration opportunities, curriculum design, and positive supports for challenging behavior are presented and applied at the early and middle childhood developmental levels. Prerequisite: admission to the teacher education program; passing scores on the CASA; 3.0 overall grade-point average; grades of C or better in SPCE 201 (SPCE 302 for elementary education and secondary content area program) and 202.
SPCE 378 - Instructional Methods for Children and Youth with Severe Disabilities (3)
Contemporary best practices and standards in Individualized Educational Plan (IEP) development and instructional design and implementation in natural settings for students who require severe interventions are presented and applied at the early and middle childhood levels. Prerequisite: SPCE 377 with a grade of C or better. Parallel: SPCE 362.

SPCE 379 - Educational Methods for Children and Youth with Physical and Multiple Disabilities (3)
Contemporary best practices in curriculum design, instructional adaptations featuring high and low technology, environmental modifications, and physical and medical management suitable for students with physical and multiple disabilities or health impairments are presented within a transdisciplinary learning model. Prerequisite: SPCE 366 with a grade of C or better.

SPCE 380 - Educating High School Students with Severe Disabilities (3)
Contemporary best practices in instructional design, implementation, and monitoring for students who require severe interventions are presented and applied at the adolescent and young adult level. Topics include transitional planning, job training, group instruction, and advanced positive supports for challenging behaviors. Prerequisite: SPCE 201 and 202 with a grade of C or better, admission to the teacher education program, and passing scores on the PPST.

SPCE 417 - Practicum: Infants/Toddlers and Preschoolers with Special Needs (1 TO 6)
Work with young children with special needs/disabilities in a supervised teaching practicum to acquire practical skills for planning and organizing activities to meet the needs of young children and their families. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned, but no more than 6 in any one semester or term.

SPCE 419 - Student Teaching: Early Childhood Special Education (1 TO 12)
Full time classroom experience in a program(s) serving young children with special needs. Prerequisite: admission to student teaching. A total of 12 credits may be earned.

SPCE 438 - Advanced Seminar in ABA (3)
Integrates and extends basic behavioral principles and behavior change procedures to address professional issues including behavioral assessment and goal development, selection of appropriate behavior change procedures, and ethical responsibilities. Prepares students for professional certification as a board-certified assistant behavior analyst. Prerequisite: a grade of C or better in SPCE 315.

SPCE 454 - Introduction to Language Acquisition for Deaf and Hard of Hearing Individuals (3)
Philosophy underlying various methods of language will be discussed as they apply to deaf education including bilingual education. Participants will compare and contrast various aspects of communication strategies. Topics include interactive language, written language and reading. Prerequisite: SPCE 240 and 246.

SPCE 456 - Language Methods for Deaf and Hard of Hearing Students (3)
Emphasizes analyzing language samples, taken from students who are deaf/hard of hearing, and other related assessments to develop behavioral objectives in the areas of form and content. Includes writing behavioral objectives in the language areas of form, content, and use for inclusion in Individual Educational Plans. Prerequisite: SPCE 454.

SPCE 458 - Teaching Reading Across the Content Areas for Deaf and Hard of Hearing Students (3)
Explores various approaches to teaching reading and applies them to reading instruction for deaf/hard of hearing students across the content areas. Curriculum maps and unit plans are developed to integrate reading across the curriculum. Reviews of reading assessments for deaf/hard of hearing students are applied to the reading strategies used for fluency, phonetics, comprehension and vocabulary. Prerequisite: EDRD 400; SPCE 454.

SPCE 466 - Student Teaching: Deaf and Hard of Hearing (1 TO 12)
Required pre-service teaching practica for students seeking licensure in special education for deaf and hard of hearing students. Offered credit/no credit only. Prerequisite: admission to student teaching. A total of 12 credits may be earned.

SPCE 474 - Methods and Materials for the Mildly Mentally Disabled (3)
Special class organization, curriculum practices and procedures, and methods and techniques used in the instruction of the mildly mentally disabled. Prerequisite: EDRD 430; MATH 391; SPCE 266, 372. Parallel: SPCE 361.

SPCE 475 - Teaching Methods in Mild Interventions for Adolescents (3)
Explores secondary methods with a focus on best practices in classroom planning, academic and behavioral issues,
and instructional strategies for adolescents through young adults with exceptional needs. Prerequisite: SPCE 376 or 476 with a grade of C or better; or permission of the department chairperson. Prerequisite or parallel: SPCE 361 (3 credits) with a grade of C or better.

SPCE 476 - Transition Planning for Adolescents with Exceptionalities (3)
Includes transition models and planning, curriculum considerations, career and vocational education, collaboration with adult service agencies, and academic planning for secondary students with mild disabilities. Prerequisite: SPCE 376 with a grade of C or better (waived for secondary content area program); permission of the department chairperson.

SPCE 483 - Seminar in Autism Spectrum Disorders (3)
Focus is on gaining an in-depth understanding of research related to the treatment, assessment, and diagnosis of Autism Spectrum Disorders. Emphasis is placed on interdisciplinary collaboration and ethical practice. Prerequisite: grade of C or better in SPCE 320.

SPCE 488 - Student Teaching: Mildly Mentally Disabled (1 TO 12)
Required for licensure in special education: mildly mentally disabled. Offered credit/no credit only. Prerequisite: admission to student teaching. A total of 12 credits may be earned.

SPCE 489 - Student Teaching: Mild Disabilities (1 TO 12)
Required for licensure in special education: mild disabilities. Offered credit/no credit only. Prerequisite: admission to student teaching. A total of 12 credits may be earned.

SPCE 491 - Student Teaching: Secondary Mild Interventions (1 TO 12)
Students teaching in a public school setting at the young adolescent and young adult (middle secondary) developmental level with students with mild interventions. Offered credit/no credit only. Prerequisite: admission to student teaching. A total of 12 credits may be earned.

SPCE 492 - Student Teaching: Children and Youth with Severe Disabilities (6 TO 12)
Required for licensure in special education areas of moderate mental retardation, severe mental retardation, profound mental retardation, multiple disabilities, and autism. Offered credit/no credit only. Prerequisite: admission to student teaching. A total of 12 credits may be earned.

SP - SPANISH

SP 101 - Beginning Spanish 1 (4)
The first course in the Spanish language. Core Transfer Library: World Languages (IWL 1910)

SP 102 - Beginning Spanish 2 (4)
Core Transfer Library: World Languages (IWL 1911) Prerequisite: SP 101.

SP 201 - Intermediate Spanish 1 (3)
Core Transfer Library: World Languages (IWL 1912) Prerequisite: SP 102 or its equivalent.

SP 202 - Intermediate Spanish 2 (3)
Core Transfer Library: World Languages (IWL 1913) Prerequisite: SP 201 or its equivalent.

SP 301 - Conversation and Composition (3)
Extensive practice in oral and written Spanish to increase proficiency and authenticity through activities, discussion, and original composition. Prerequisite: SP 202.

SP 302 - Composition and Grammar (3)
Extensive practice in written Spanish with focused review and application of grammatical structures. Prerequisite: SP 202.

SP 304 - Spanish Reading Skills (3)
The primary objectives are to develop and improve student reading skills in Spanish. Students will deepen their understanding of texts and learn how to conduct a critical analysis. Prerequisite: SP 202.

SP 305 - Grammar for Heritage Speakers (3)
A grammar course designed for heritage or native speakers of Spanish. Prerequisite: SP 202. Open only to heritage or native Spanish speakers (as determined by the department chairperson).

SP 306 - Composition for Heritage Speakers (3)
A composition course designed for heritage or native speakers of Spanish. Extensive practice in written communication to increase fluency and accuracy. Prerequisite: SP 202. Open only to heritage or native Spanish speakers (as determined by department chairperson).

SP 335 - Topics in Hispanic Cultures (3 TO 6)
Specified topics in contemporary and/or historical cultures from a variety of Spanish-speaking countries and regions.
Prerequisite: SP 301 and 302 or SP 305 and 306. A total of 6 credits may be earned in courses with different topics.

**SP 337 - Spanish Phonetics and Phonology: Theory and Application (3)**

An introductory course in Spanish phonetics, phonology, and basic concepts of second language acquisition. Application of phonetics and phonology to understanding, speaking, and teaching Spanish. Use of the International Phonetic Alphabet. Prerequisite: SP 301 and 302 or SP 305 and 306.

**SP 338 - Spanish for Professions (3 TO 6)**

A concise introduction to Spanish grammar and communication designed to meet the working needs of pre-professionals and professionals in specified disciplines. Prerequisite: SP 301 and 302 or SP 305 and 306. A total of 6 credits may be earned in courses with different topics.

**SP 340 - Survey in Spanish Linguistics (3)**

A survey of Spanish linguistics with an emphasis on morphology, syntax, sociolinguistics, applied linguistics, and historical events pertinent to linguistic developments. Delineates major contrastive linguistic features between English and Spanish. Prerequisite: SP 301 and 302 or SP 305 and 306.

**SP 361 - Survey of Spanish Literature (3)**

Analysis of largely canonical texts, as well as literary movements from Spain. Reading and discussion will be supported by an introduction to tools of literary criticism. Prerequisite: SP 301 and 302 or SP 305 and 306.

**SP 362 - Survey of Spanish-American Literature (3)**

Analysis of largely canonical texts, as well as literary movements from Spanish-America. Reading and discussion will be supported by an introduction to tools of literary criticism. Prerequisite: SP 301 and 302 or SP 305 and 306.

**SP 400 - Spanish Study Abroad (3 TO 9)**

Study of intermediate or advanced Spanish language, literature, and culture in a foreign country where Spanish is the native language. May include seminars arranged during travel. A total of 9 credits may be earned.

**SP 403 - Seminar in Cultural and Literary Studies (3 TO 9)**

Topics vary according to artist/author, genre, medium, or period and will be studied in depth. Intensive study of works of cultural production from a selected theme or period from Spain or Latin America. Typically involves advanced literary analysis and research. Prerequisite: SP 361 or 362. A total of 9 credits may be earned in courses with different topics.

**SP 404 - Seminar in Language, Linguistics, and Culture (3 TO 9)**

Advanced seminar course in Spanish language, linguistics, and culture. Topics will vary and include among others, advanced grammar, linguistics, conversation, composition, and translation. Prerequisite: SP 337 or 340. A total of 9 credits may be earned in courses with different topics.

**SP 498 - Readings (1 TO 9)**

Individual reading or research to allow students to explore special topics with an individual instructor. Prerequisite: SP 301 and 302 or SP 305 and 306. A total of 9 credits may be earned.

**SPST - SPORTS STUDIES**

**SPST 200 - Approaches to the Study of Sport (3)**

Foundations course. An interdisciplinary examination of sport in relation to broader historical, philosophical, political, economic, cultural, and social issues and trends.

**SPST 250 - Special Topics in Sports Studies (3)**

A seminar focusing on issues pertaining to students enrolled in the minor in sports studies. Open only to approved sports studies minors.

**SPST 469 - Sports Internship (3)**

Involves assigned duties in a sports-related organization, agency, or business. Written work applying interdisciplinary approaches to the practical experience is required. Prerequisite: permission of the program director. May be taken once for credit.

**SPST 490 - Capstone Seminar (3)**

Capstone seminar in which each student completes a sports-related project such as a research paper, documentary film, Web page, or community service initiative. Results are formally presented to peers and faculty. Prerequisite: SPST 200; 9 credits of additional course work in the minor, or permission of the program director. Open only to sports studies minors.

**SPST 499 - Independent Study (1 TO 3)**

Sports-related topics for independent study and research to be chosen and investigated in consultation with an instructor with competence in the area involved. Prerequisite: permission of the program director. A total of 3 credits may be earned.
**SPTA - SPORT ADMINISTRATION**

**SPTA 190 - Introduction to Sport Administration (3)**

An introductory course that examines the organization and management of sport including the following areas: finance, law, ethics, facility management, event management, media relations, high school sports, collegiate sports, and recreational sports. Students will become familiar with career opportunities within the sport management field. Open only to freshmen, sophomores, and juniors, or by permission of the program coordinator.

**SPTA 195 - Computer and Technology Applications for Sport Administration (3)**

An introductory course in computer technology focused upon application software use in word processing, desktop publishing, presentation graphics, spreadsheets, basic database management, and website design. Also includes an emphasis on the basics of operating systems, social media, and special technological applications of scheduling, statistical, and ticketing software unique to sport administration. Prerequisite: permission of program coordinator. Parallel: SPTA 190. Not open to students who have credit in ISOM 125 or CS 104. Open only to sport administration majors.

**SPTA 205 - Sport History (3)**

A thorough examination of the various historical, sociological, and psychological aspects of sports in our society. Open only to sport administration majors with full acceptance status.

**SPTA 290 - Revenue Generation in Sport (3)**

An exploration and application of sport industry sales processes focused upon ticket sales, sponsorship sales, premium seating, and fundraising. Introduces the sales process including prospecting, calling, presenting, handling objections, negotiating, and closing. Making sales calls for a sport organization is an integral component of the class. Open only to sport administration majors with full acceptance status.

**SPTA 300 - Sport Law (3)**

Explores how the legal system applies to the sport industry and impacts managerial decisions. Topics covered include tort law, risk management, agency law, contract law, employment law, constitutional law, gender equity, intellectual property law, and antitrust law. Students will examine how prior cases impact future decisions. Prerequisite: SPTA 190. Open only to sport administration majors with full acceptance status.

**SPTA 303 - Sport Marketing (3)**

The application of basic principles of marketing to the managed sport industry with emphasis on intercollegiate athletics, professional sport and multisport club operations. Designed to provide students with a contemporary understanding of marketing principles as they are currently being applied in various sport management contexts. Prerequisite: SPTA 190. Open only to sport administration majors with full acceptance status.

**SPTA 305 - Sport Finance (3)**

A basic knowledge of the principles, processes, and strategies related to the economic and financial aspects of sport organizations. Introduces various financial aspects used in the current sport institutions and organizations including public subsidization of sports facilities, economic impact analysis, public-private partnerships, sources revenue for team operation, and related issues. Open only to sport administration majors with full acceptance status.

**SPTA 345 - Sport Communication (3)**

An overview of effective communication practices in the sport industry with an emphasis on the role of media and public relations within sport. Topics covered include developing public relations campaigns, creating media guides and press releases, managing relationships with the media, staging interviews and press conferences, and crisis communication. Open only to sport administration majors with full acceptance status.

**SPTA 402 - Event and Facility Management in Sport (3)**

Develops a student's understanding and knowledge of the competencies necessary to execute sporting events and manage sports facilities through theory and application. Topics covered include conceptualizing, planning, managing, and evaluating events. Students will plan and implement an event for students and the community. Open only to sport administration majors with full acceptance status.

**SPTA 448 - Sport Governance (3)**

Develops a contemporary understanding of governing bodies, leadership, ethical decision making, and policy at all levels of sport. Emphasis is placed on governance issues specific to youth/community, amateur, intercollegiate, Olympic/international, and professional sport organizations. Prerequisite: SPTA 190. Open only to sport administration majors with full acceptance status.
SPTA 470 - International and Comparative Administration of Sport (3)
An investigation of the nature and role of the sport industry of different world regions. Includes an analysis of selected national systems, international and comparative sport management, and international sporting events in order to better manage the growing diversity in U.S. sport organizations due to growing migration of athletes, coaches, and professionals. Prerequisite: SPTA 190 and permission of the program coordinator. Open only to sport administration majors with full acceptance status.

SPTA 479 - Sport Administration Internship (12)
A supervised work and learning experience in the application of sport management knowledge and skills. Internships are to be completed with organizations within the sport industry approved by the program coordinator including professional, collegiate, interscholastic, and amateur organizations. Prerequisite: students must possess senior status (90 credits). Requires approval of program coordinator. Open only to sport administration majors with full acceptance status.

SPTA 485 - Sport Management (3)
Explores organizational management issues related to sport. Organizational theory topics include organizing, planning, decision making, human resources, leadership, program evaluation, and organizational effectiveness. Students will apply these topics to sport organizations and to their own career path through professional development exercises. Open only to sport administration majors with full acceptance status.

SPTA 499 - Independent Study in Sport Administration (1 TO 3)
An opportunity to investigate an area of particular interest to the student, under supervision of a faculty member in sport administration. Extensive reading, research, analysis, and writing. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned. Open only to sport administration students.

SS 350 - Teaching History/Social Studies in Junior High/Middle School (3)
Emphasizes disciplinary literacy, civic education, and methods of planning, instruction, and assessment in junior high/middle school history/social studies classrooms. Prerequisite: junior status; completion of HIST 200 with a grade of C or better; admission to professional education program. Parallel: EDJH 385.

SS 395 - Teaching Social Studies in Secondary Schools (3)
Emphasizes discipline-specific teaching methods, civic education, deliberative discussion in the classroom, and planning, instruction, and assessment in high school history/social science classrooms. Prerequisite: SS 350. Parallel: EDSE 380.

SS 397 - Teaching Social Studies in the Elementary School (3)
Materials and methods for teaching social studies, grades 1-6. Emphasizes social science concepts, behavioral objectives, teaching strategies, learning resources, attitudes and values, skill development, and program assessment.

SS 398 - Teaching Social Studies in Early Childhood/Kindergarten-Grade 3 (3)
Materials and procedures for teaching social studies from early childhood through grade three. Emphasizes concepts, behavioral objectives, inquiry techniques, learning resources, individualizing instruction, value clarification, skill development, and program evaluation. Required for early childhood (birth-grade 3) program.

SS 450 - Independent Study (1 TO 3)
Directed study of special problems or research in social science education by individuals or groups of students. Topics to be investigated are chosen after consultation with an instructor with special competence in the area involved. Prerequisite: permission of the department chairperson. A total of 3 credits may be earned.

SS 460 - Student Teaching in History and the Social Sciences (3)
Provides an opportunity for student teachers in history and the social sciences to integrate the knowledge, skills, and dispositions developed in their prior content course work, course work in history/social science education, and other course work in the professional education sequence. Prerequisite: admission to student teaching. Parallel: EDSE 460, 465. Open only to social studies teaching majors.
SUST - SUSTAINABILITY

SUST 250 - Introduction to Sustainable Development (3)
Presents sustainable development objectives as dependent upon interactions both within and among systems comprising natural, human/social, and economic capital. Examines elements and linkages essential for functioning of these systems. Addresses values that frame decision making for maintaining systems elements and linkages and for setting natural, human/social, and economic sustainable development goals.

SUST 320 - Systems Thinking for Sustainability (3)
An introduction to the composition and dynamic complexity of natural and human-fabricated systems. Differentiation of systems types, their operations, and use of systems frameworks for modeling future states are addressed. Emphasis on “whole systems” and “life cycle” approaches lead students through progressive exploration of case studies that culminates in a research presentation based on a systematic exploration of a selected human-fabricated system. Open only to students with permission of advisor or instructor.

SUST 330 - Measurement and Reporting for Sustainability (3)
Introduces students to the metrics, indicators, and reporting systems used to characterize and influence organizational practices and performance relative to sustainability goals. Emphasis is placed upon how these sustainability indicators, especially greenhouse gas inventories, are completed, analyzed, and reported. Assignments will provide students with the opportunity to critically analyze data and prepare reports. Prerequisite: SUST 320 or by permission of advisor or instructor. Open only to students with permission of advisor or instructor.

SUST 340 - Analytics and Modeling for Sustainability (3)
Introduces students to principles of predictive analysis and computer-based modeling tools which assist stakeholders in making informed decisions. Emphasis is on systems thinking, statistical techniques, and the application of systems dynamics theory for quantitatively analyzing and predicting the potential impact of organizational decisions upon sustainability issues, e.g., population, economics, water scarcity, greenhouse gas emissions, climate change, energy, food security, and biodiversity. Prerequisite: SUST 320 and 330 or by permission of advisor or instructor. Open only to students with permission of advisor or instructor.

SUST 400 - Creating a Sustainable Future (3)
Addresses from a systems perspective multiple limiting factors in the environmental, social, and economic domains that constrain global sustainability and the interactions among these factors. The influence of civilization on these factors and on their interconnections is examined along with potential human interventions for ensuring long-term viability of critical systems. Includes a substantial immersive project component for assessing the sustainability of an existing system and developing recommended interventions for enhancing long-term success of that system.

TCOM - TELECOMMUNICATIONS

TCOM 100 - The Entertainment Media (3)
Introduction to the evolving role of the entertainment media in American society, with emphasis on understanding the impact of technology, creativity, and business on entertainment media industries and their interaction with American consumers. Not open to students who have credit in TCOM 101 or JOUR 101. Open only to students not designated as pre-telecommunications or not declared majors or minors in telecommunications.

TCOM 101 - Foundations of Telecommunications (3)
Introduction to the technology, industries, economics, and regulatory structures involved in the electronic media. Provides an overview of media history with special emphasis on Internet, mobile, and emerging technologies. Not open to students who have credit in TCOM 101 or JOUR 101. Open only to approved pre-telecommunications students, and business analytics majors with telecommunications concentration.

TCOM 204 - Media Analysis and Criticism (3)
Critical approaches to multiple media texts, examining their relationships to society and culture. Prerequisite: TCOM 101. Open only to approved telecommunications majors and minors, pre-telecommunications students, and business analytics majors with telecommunications concentration.

TCOM 206 - Writing for Electronic Media: Scriptwriting (1)
Introduction to scriptwriting for electronic media. Basic principles and elements used in the creation of entertainment scripts for media programs. Prerequisite: TCOM 101. Open only to approved telecommunications majors and minors, pre-telecommunications students, and business analytics majors with telecommunications concentration.
TCOM 207 - Writing for Electronic Media: Copywriting (1)
Introduction to copywriting for electronic media. Basic principles and elements used in the creation of advertising and promotion, including advertising objectives and creative strategy. Prerequisite: TCOM 101. Open only to approved telecommunications majors and minors, pre-telecommunications students, and business analytics majors with telecommunications concentration.

TCOM 231 - Media Aesthetics (1)
A study of visual aesthetics used in cinema, interactive, audio and video design. Students will learn image, motion, and non-linear design concepts through thoughtful analysis of classic and contemporary media. Open only to approved telecommunications majors and minors, and pre-telecommunications students.

TCOM 284 - Practical Aspects of Media Law (1)
Introduction to practical legal and ethical issues facing media professionals, including freedom of speech and press, libel, privacy, copyright, and advertising regulation. Prerequisite: TCOM 101. Open only to approved telecommunications majors and minors, pre-telecommunications students, and business analytics majors with telecommunications concentration.

TCOM 288 - Special Topics in Pre-Telecommunications (1)
A variable topic seminar focusing on issues pertaining to students enrolled in pre-TCOM courses. Topics will come from multiple TCOM concentration areas. A total of 3 credits may be earned, but no more than 1 in any one semester or term. Open only to approved pre-telecommunications students.

TCOM 299X - Experimental/Developmental Topics (1 TO 3)
Topics relevant to the discipline. Course titles to be announced before each semester. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. A total of 9 credits may be earned, but no more than 3 in any one semester or term. Open only to approved telecommunications majors and minors. Does not count toward the telecommunications major or minor.

TCOM 301 - Emerging Media and Culture (3)
Study of the impact of new media on contemporary culture, including hands-on exploration of fads and phenomena and discussion of academic and industrial studies related to new technologies. Includes independent research projects. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors.

TCOM 306 - Programs and Audiences (3)
How media companies collect and analyze audience data to support decisions involving content and advertising. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors, and business analytics majors with telecommunications concentration.

TCOM 307 - Television Studies (3)
Addresses the cultural, social, and political impact of television through audience theory, genre theory, and visual studies. Students will watch programs critically, engage in discussions of current theory, and write analyses of programming. Topics vary by semester. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors.

TCOM 324 - News Videography (3)
Creation of polished news stories using engaging video with emphasis on acquiring and editing sequenced video and compelling natural sound. Geared across platforms to include content for emerging media as well as television and the Web. Prerequisite: NEWS 221. Open only to students in the telecommunications news concentration or a journalism department program.

TCOM 326 - Presentation Techniques (3)
Exploration of techniques used to enhance vocal and on-camera presentation across multiple media platforms. Prerequisite or parallel: TCOM 324. Open only to students in the telecommunications news concentration or a journalism department program.

TCOM 330 - Beginning Digital Audio Production (3)
Covers the basic skills and techniques required for audio production in radio, television, film, and Web applications. Requires completion of a prescribed array of projects. Various studio and field recording experiences involving digital equipment are offered. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231. Open only to approved telecommunications majors and minors, and pre-telecommunications students.
TCOM 332 - Beginning Digital Video Production (3)  
Covers the basic skills of equipment operation in a studio and field environment. Requires completion of a prescribed array of projects. Various studio and field experiences involving digital equipment are offered. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231. Open only to approved telecommunications majors and minors.

TCOM 333 - Advanced Digital Audio Production (3)  
Application of elaborate audio acquisition and editing techniques for broadcasting, Internet, and cinema applications, including an introduction to surround sound. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231, 330, 332. Open only to approved telecommunications majors and minors.

TCOM 334 - Advanced Digital Video Production (3)  
Production of complex storytelling projects. Finding the unusual story in the usual place. Shooting coverage, use of music, and advanced post-production techniques will be covered. All students will be required to produce multiple stories. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231, 330, 332. Open only to approved telecommunications majors and minors.

TCOM 335 - Beginning Multimedia Production (3)  
An introduction to emerging media technologies, emphasizing graphic design, 2D animation, HTML/CSS coding, data compression, and post-production. Students will create specialized content for multiple media outlets including web, television, cinema, and mobile. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231. Open only to approved telecommunications majors and minors.

TCOM 340 - Electronic Media Sales (3)  
Types and practices of retail and business-to-business advertising sales. Study includes radio, television, Web-based revenue streams. Skills development in client discovery, qualifying, ad plan creation and presentation, writing and speaking skills, understanding media and the marketplace, audience measurement. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors and approved advertising majors.

TCOM 344 - Electronic Media Promotion (3)  
Methods, concepts, strategies, and creation of efficient and effective target-oriented program, audience, image, brand extension, and sales promotion campaigns. Media include radio, television, cable, and Web-based applications, using selected media to reach target demographic markets. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors.

TCOM 345 - Advanced Media Sales and Promotion (3)  
Study of advanced sales and promotion theories and techniques with an emphasis on experiential learning. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 340, 344. Open only to approved telecommunications majors and minors.

TCOM 346 - Sales and Promotion Writing (3)  
Introduces various writing skills needed by those entering the areas of telecommunications sales, promotion, and management. Practice proposal writing, grant writing, storyboarding, media kit development, and business writing. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to telecommunications majors and minors and approved advertising majors.

TCOM 347 - Special Topics in Telecommunications Sales and Promotion (3)  
Seminar offering opportunities for students to hone skills or expand a knowledge base while working on a specific topic throughout the semester. Focus on particular aspects of telecommunications sales and promotion with emphasis on experiential learning. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors, and business analytics majors with telecommunications concentration.

TCOM 350 - Motion Graphics and Design (3)  
Explores emerging media technologies with an emphasis on motion graphic design. Introduces essential skills in color grading, 2-D animation, graphic design, motion graphics, video compositing, special effects, and distribution of linear media for television, Web, and mobile devices. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231 and 330.
and 332. Open only to approved telecommunications majors and minors.

**TCOM 351 - Web Development (3)**
Design, development, and analysis of dynamic Web sites. Design element expanded to include audience considerations, interactivity, multi-screen layout, HTML and CSS coding, and usability. Students design and create sites for fixed and mobile use. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231 and 330 and 332. Open only to approved telecommunications majors and minors.

**TCOM 357 - Special Topics in Film and Media Studies (3 TO 6)**
Overview of current theoretical discussions related to the aesthetic, social, historical, and/or industrial state of film and media. Students will utilize research and critical reading skills by producing essays designed to develop skills in scholarly writing. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. A total of 6 credits may be earned. Open only to approved telecommunications majors and minors.

**TCOM 360 - World Film History 1 (3)**
History of world cinema from its beginning until World War II. Study of the continuing influence of American cinema, as well as key movements in other national cinemas before 1941, such as German Expressionism and the Soviet Montage School. Open only to approved telecommunications majors and minors and film/screenwriting minors.

**TCOM 361 - World Film History 2 (3)**
Continues the study of world cinema from World War II until the present. Study of the continuing influence of American cinema, as well as the post-1945 national cinema movements exemplified by Neo-Realism and the French New Wave films. Open only to approved telecommunications majors and minors and film/screenwriting minors.

**TCOM 363 - Film Genres (3)**
Study of the general types and forms of film expressions, each identified with a specific tradition. Film genres include westerns, screwball comedies, gangster films, musicals, etc. Open only to approved telecommunications majors and minors and film/screenwriting minors.

**TCOM 365 - History of Documentary Film (3)**
Survey of the history of non-fiction film, with focus on American and European work. Provides students the opportunity to view and discuss a number of historically significant documentaries. Examines the various styles and techniques of famous documentary filmmakers. Open only to approved telecommunications majors and minors and film/screenwriting minors.

**TCOM 381 - Sports and Electronic Media (3)**
Examines the practical, social, and economic relationships between two major areas of American popular culture—the electronic media and sports. Combines aspects of announcing, production, sales and marketing, history, and policy. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to approved majors in telecommunications, journalism, or sport administration.

**TCOM 383 - Digital Sports Seminar (3 TO 6)**
A variable topic seminar focusing on issues pertaining to the business of digital sports production. A total of 6 credits may be earned. Open only to approved majors in telecommunications, journalism, sport administration, or sports studies.

**TCOM 384 - Electronic Media Law (3)**
Examines the relationship between the government and the electronic media in the United States. History and philosophy of the regulatory process and its effects on traditional and emerging media. TCOM majors and minors may earn credit in only one of the following courses: TCOM 384, NEWS 409, NEWS 449. Prerequisite: TCOM 101, junior standing. Open only to approved telecommunications majors and minors, and business analytics majors with telecommunications concentration.

**TCOM 390 - Independent Study (1 TO 3)**
Academic project directed by a TCOM faculty member. Written proposal must be approved by department chairperson prior to term of study. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; permission of the department chairperson prior to term of study. A total of 6 credits may be earned, but no more than 3 in any one semester or term. Open only to approved telecommunications majors and minors.

**TCOM 391 - Internship (1 TO 6)**
Practical, supervised, on-the-job experience in media-related industry. Must submit written application to department and meet criteria before enrollment. TCOM majors and minors cannot exceed a total of 15 credits in
any combination of TCOM 391, 397, 399, and 497.
Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; permission of the department chairperson. A total of 6 credits may be earned. Open only to approved telecommunications majors and minors.

TCOM 397 - Immersion: External Projects (1 TO 6)
Student-driven immersive experience utilizing particular elements of the telecommunications field in collaboration with another academic department and faculty. Student team produces tangible outcome or product of benefit to campus, local, state, national, or international community. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned. Open only to approved telecommunications majors and minors.

TCOM 399 - Practicum (1 TO 3)
Practical, supervised experience related to telecommunications. Must submit written application and detailed proposal to supervising faculty member. TCOM majors and minors cannot exceed a total of 15 credits in any combination of TCOM 391, 397, 399, and 497. Prerequisite: pre- telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; permission of the department chairperson. A total of 3 credits may be earned. Open only to approved telecommunications majors and minors.

TCOM 408 - Media Ethics and Social Responsibility (3)
Political, economic, social, and governmental influences on telecommunications. Examines contemporary issues that confront media today and the ethics surrounding them. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; senior standing. Open only to approved telecommunications majors and minors, and business analytics majors with telecommunications concentration.

TCOM 422 - Advanced Video and Audio Reporting (3)
Developing and crafting news packages on assignment and under deadline for a variety of electronic platforms. Emphasis on crafting engaging, people-centered scripts, purposeful stand-ups, and compelling on-camera interviews. Includes strategies for finding information from public records and databases. Prerequisite: TCOM 324. Open only to students in the telecommunications news concentration or a journalism department program.

TCOM 426 - Electronic News Producing (3)
Development and production of a live, full-service newscast on deadline with an emphasis on teamwork.

Includes the gathering, writing, organizing and presenting of a news program across multiple platforms and for specific audiences. Evaluation of professional and student newscasts for substance and style. Prerequisite: NEWS 221. Open only to students in the telecommunications news concentration or a journalism department program.

TCOM 433 - Seminar in Digital Audio Production (3 TO 9)
Explores the history and application of multi-channel sound recording and exhibition in the recording, film, broadcast, and Internet industries. Provides specialized production experiences in surround sound composition, recording, editing, and exhibition techniques. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 333. A total of 9 credits may be earned but no more than 6 in any one semester or term. Open only to approved telecommunications majors and minors.

TCOM 434 - Digital Video Production Workshop (3)
Planning and producing an original video product. Particular focus on multiple storytelling styles and post-production techniques. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 334. Open only to approved telecommunications majors and minors.

TCOM 435 - Cinema Entertainment (3)
Introduces the process required to direct and produce the short digital film. Emphasizes communication with actors and camera blocking. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; permission of the instructor. Open only to approved telecommunications majors and minors.

TCOM 436 - Digital Post-Production Workshop (3)
Post-production techniques for assembly of video productions. Topics include non-linear editing, compression theory, color theory, digital delivery, metadata, and formatting for second screens. Advanced motion graphics and visual effects as they relate to post-production workflows. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231 and 330 and 332. Open only to approved telecommunications majors and minors.

TCOM 444 - Management of Telecommunications (3)
Problems and responsibility of management in the telecommunications industry. Consists largely of guest
lecturers, class discussion, management role-playing, and computer projects to become familiar with administrative practices in the industry. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; senior standing. Open only to approved telecommunications majors and minors.

TCOM 445 - Sales and Promotion Management (3)
Issues and responsibilities facing sales and promotion management in telecommunications industries. Consists largely of guest lecturers, class discussion, and management role playing. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 231 and 330 and 332. Open only to approved telecommunications majors and minors.

TCOM 450 - Seminar in Emerging Media (3)
Examines emerging media and digital design on multiple levels, from choosing of metaphors to creation of complex interactive experiences. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; senior standing. Open only to approved telecommunications majors and minors.

TCOM 464 - Controversy and Media Studies (3)
Explores controversy in film and other media. Seminars may focus on topics such as controversy in media history, censorship, controversial content, and the social impact of shock value. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses. Open only to approved telecommunications majors and minors.

TCOM 465 - Seminar in Film Theory (3)
Analysis of the key theorists in the history of world cinema as well as some influential critics of film. Includes a special focus on the documentary film. Open only to approved telecommunications majors and minors and film/screenwriting minors.

TCOM 487 - Seminar in Digital Video Production (3 TO 6)
Each seminar class will offer a variety of opportunities for students to hone their skills while working on a specific topic, or topics, throughout the semester. Emphasis on creating media for external distribution. The seminar may emphasize one particular technology, such as audio, video, or emerging media, or a combination, depending on the project. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 334. A total of 9 credits may be earned, but no more than 6 in any one semester or term. Open only to approved telecommunications majors and minors.

TCOM 497 - Immersion: Internal Projects (1 TO 6)
Student-driven immersive experience utilizing telecommunications and directed by TCOM faculty. Tangible outcome or product is of benefit to campus, local, state, national, or international community. Prerequisite: permission of instructor and department chairperson. A total of 6 credits may be earned.

TCOM 499 - Special Projects Seminar in Digital Production (3)
Requires planning, writing, and producing a major project utilizing audio, video, or emerging media. Each project, as it moves through development, will serve as a case study for the class to discuss and evaluate. Prerequisite: pre-telecommunications core courses with C (2.0) or better grades in each, and a 2.5 grade-point average for these courses; TCOM 433, 450, or 487. Open only to approved telecommunications majors or minors.

TDPT - TECHNOLOGY: DEPARTMENT

TDPT 100 - Technology and Society (3)
The history, development, production, use, and assessment of technology and an examination of its effects upon resources, individuals, society, and the environment.

TDPT 101 - Fundamentals of Safety and Health Technology (3)
Study of accident-prevention and loss-control methods, procedures, and programs and their impact on people and workplaces; and the ethical application of codes and standards, applicable safety and health-related practices, and safety engineering and management principles.

TDPT 102 - Introduction to Computer-Aided Design (3)
Designed to provide students with an introduction to the use of computer-aided software utilizing the use of 2-D applications.

TDPT 105 - Technical Design Graphics (3)
Introduction to mechanical design and production drawing. Topics include: sketching, lettering, solid modeling, multiview drawings, isometric drawings, auxiliary and section views, dimensioning and tolerancing, and the creation of working drawings. Unigraphics solid modeling software is the primary design tool used in the laboratory. A weekly laboratory is scheduled.
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<th>COURSES</th>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>TDPT 110</td>
<td><strong>Instructional Technology in the Elementary School</strong> (2)</td>
<td>Develops basic skills in the use of instructional technology to support teaching and learning in the elementary school. Includes lab activities outside of class.</td>
</tr>
<tr>
<td>TDPT 125</td>
<td><strong>Survey of Plastics</strong> (3)</td>
<td>Surveys the plastics industry and introduces the uniqueness of plastics relative to traditional materials. Topics include plastics organizations, environmental issues, career and job opportunities, identification of plastics, manufacture of plastics, application of plastics, etc.</td>
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<tr>
<td>TDPT 154</td>
<td><strong>Graphic Communication for Interior Design</strong> (3)</td>
<td>Introduction to the fundamentals of graphic communication techniques used in design fields. Explores sketching, mechanical, and computer techniques to produce graphics for a variety of presentation methods.</td>
</tr>
<tr>
<td>TDPT 160</td>
<td><strong>Technical Analysis</strong> (3)</td>
<td>The computational and presentation skills needed to solve technical problems.</td>
</tr>
<tr>
<td>TDPT 161</td>
<td><strong>Introduction to Manufacturing Industries</strong> (3)</td>
<td>Introduction to manufacturing and its managed activities: research and development, production, marketing, industrial relations, and finance. Laboratory experiences involve organizing, staffing, and operating a model manufacturing enterprise.</td>
</tr>
<tr>
<td>TDPT 201</td>
<td><strong>Safety and Health Regulations and Compliance</strong> (3)</td>
<td>Mandatory safety and health regulations and compliance standards and procedures are investigated based upon Occupational Safety and Health Administration (OSHA), insurance institute, and workplace standards/practices.</td>
</tr>
<tr>
<td>TDPT 203</td>
<td><strong>Material Processing</strong> (3)</td>
<td>Industrial materials and processes are studied, including material identification, classification, properties, procurement, processing, use, and disposal. Includes laboratory activities.</td>
</tr>
<tr>
<td>TDPT 204</td>
<td><strong>Energy Processing</strong> (3)</td>
<td>Examines sources and types of energy and common energy processing techniques. Emphasizes controlling and transmitting energy and the operation of energy conversion systems. Includes laboratory activities.</td>
</tr>
<tr>
<td>TDPT 210</td>
<td><strong>Engineering Principles</strong> (3)</td>
<td>Examines core concepts and principles of engineering, including constraints, optimization, and predictive analysis. Laboratory experiences emphasize the development of skills required to apply engineering processes. Prerequisite: MATH 111; PHYC 100.</td>
</tr>
<tr>
<td>TDPT 213</td>
<td><strong>Interior Construction Materials, Processes, and Products</strong> (3)</td>
<td>Designed specifically for non-majors. Content is organized around specific construction units related to materials, processes, and products of residential and commercial construction.</td>
</tr>
<tr>
<td>TDPT 262</td>
<td><strong>Manufacturing Materials</strong> (3)</td>
<td>Fundamentals of material science with an emphasis on how material properties influence their application in products and processing. Metallic, polymeric, and ceramic materials will be discussed. Laboratory activities using standardized testing procedures will provide a practical understanding of material characteristics. Weekly laboratory scheduled. Prerequisite: CHEM 111 or permission of the department chairperson.</td>
</tr>
<tr>
<td>TDPT 280</td>
<td><strong>3-D Prototyping</strong> (3)</td>
<td>Introduction for students from many disciplines to use the 3-D graphics software, reverse engineering, rapid prototyping, laser machining, and CNC machining to iteratively manipulate original 3-D product designs and make prototypes.</td>
</tr>
<tr>
<td>TDPT 299X</td>
<td><strong>Experimental/Developmental Topics</strong> (3 OR 6)</td>
<td>Topics relevant to the discipline. Course titles will be announced before each semester. A total of 6 credits may be earned.</td>
</tr>
<tr>
<td>TDPT 301</td>
<td><strong>Developing and Managing Safety and Health Programs</strong> (3)</td>
<td>An analysis of the concepts, relationships, and principles of managing an organization's occupational safety and health technology duties and functions; and the development of safety objectives and policies, training procedures and practices for integration into an organization, and evaluation and management of risk and program implementation and evaluation. Prerequisite: TDPT 101 or permission of the instructor.</td>
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<tr>
<td>TDPT 303</td>
<td><strong>Manufacturing Systems</strong> (3)</td>
<td>Manufacturing systems, tools, and processes are studied as they are applied to producing products. Laboratory experiences cover manufacturing systems emphasizing tooling design, automated manufacturing, and control.</td>
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systems. Includes laboratory activities. Prerequisite: CM 106 or TDPT 105; TEDU 108 or permission of the department chairperson.

TDPT 360 - Industrial Safety and Health (3)
Study of the practices used to establish a safe and healthful environment for industrial personnel. Includes the requirements of safety- and health-regulating agencies, and hazard recognition and correction.

TDPT 364 - Technology Education for the Elementary Grades (2)
A laboratory in technology education emphasizing the use of tools, materials, and processes that provide enrichment of the elementary program. Methods of planning and developing individual and group activity units are examined and evaluated.

TDPT 369 - Cooperative Education in Technology (1 TO 3)
A planned continuous placement in a technology-related position that integrates and applies course content to the workplace. A paid work and learning experience for computer technology and graphic arts management majors. Prerequisite: permission of the work experience coordinator. A total of 3 credits may be earned.

TDPT 390 - Training and Development in Industry (3)
Training and development in industry and their relationship to the job and organization. Emphasizes skills needed to systematically plan, implement, evaluate, and revise training and development programs. Provides opportunities for practical application and practice.

TDPT 400 - Capstone in Technology (3)
Use of hands-on laboratory experiences to apply, integrate, and assess technological concepts, systems, processes, and products. Includes laboratory activities. Prerequisite: permission of the department chairperson; junior standing.

TDPT 406 - Technological Decision Making (3)
Focuses on technology assessment techniques used to differentiate the potential impacts of alternative technological decisions. Policy development in the public and private sectors, and at the personal level, is examined. Prerequisite: junior status.

TDPT 450 - Industrial Research and Development (3)
Focuses on the methodology and practices of technical research and development as conducted in an industrial setting. In laboratory activities students perform basic tasks associated with product and process research and development. Prerequisite: TDPT 161 or TEDU 403.

TDPT 480 - Advanced Prototyping: Additive Manufacturing (3)
Experimentation and advanced technologies for designing and producing prototypes using 3D printing and other digital additive manufacturing. Prerequisite: TDPT 280 or 495 or permission of the instructor.

TDPT 495 - Green Prototyping and Upcycling (3)
Students use recycling, 3D printing, and lasers to design environmentally sustainable products. Not open to students who have credit in TDPT 595.

TEDU - TECHNOLOGY: EDUCATION

TEDU 102 - Design Techniques (3)
Introduces tools and techniques for developing and communicating technological designs. Experiences include sketching, rendering, mechanical and computer-aided drawing, modeling, and presentation skills. Includes laboratory activities.

TEDU 108 - Production Techniques (3)
Studies the tools, machines, and processes used in the technology education classroom and laboratory. Laboratory experiences help develop techniques related to material and information processing. Includes laboratory activities.

TEDU 195 - Exploring Technology Education (3)
The profession of teaching technology in the public schools is introduced and discussed. Study of the role of education, good teacher qualities, and the development of technology education programs. State and national curriculum trends are analyzed.

TEDU 202 - Product Design (3)
A variety of design models and techniques are explored. Focuses on elements and principles of design, design processes and characteristics, developing and evaluating potential solutions, modeling, and presenting solutions. Includes laboratory activities. Prerequisite: TEDU 102, 108.

TEDU 290 - Career and Technical Student Organizations (3)
Emphasizes the implementation, maintenance, and evaluation of career and technical student organizations.

TEDU 292 - Principles and Philosophy of Career and Technical Education (3)
Introduction to the foundation and operation of various career and technical educational programs. Analyzes
legislation in the light of past and present issues of career and technical education and its function as a vital component of the educational system.

**TEDU 304 - Transportation Systems (3)**
Studies transportation technology as it is applied to vehicular and support systems for moving people and cargo in various environments. The effects of transportation technology on individuals, society, and the environment are introduced and explored. Includes laboratory activities. Prerequisite: TEDU 102, 108 or permission of the department chairperson.

**TEDU 305 - Technological Systems (3)**
The study of technological systems involving communication, production, transportation, and biotechnologies. Classroom and laboratory experiences examine the nature of modern systems.

**TEDU 390 - Trade and Occupational Analysis (3)**
A study of the fundamentals of analyzing trades and occupations. Techniques of identifying occupations by breakdown into jobs, tasks, and processes.

**TEDU 392 - Career and Technical Related Class Content (3)**
A study of the sources of related materials and techniques of developing and using these materials.

**TEDU 393 - Career and Technical Guidance (3)**
Principles, purposes, and practices of guidance by the teacher. Examines and evaluates educational and occupational information, testing programs, school records, occupational trends, and job-training programs.

**TEDU 395 - Teaching Technology (3)**
Studies the development and implementation of strategies for teaching technology education. Emphasizes planning daily instruction, preparing support materials, classroom management, assessing and evaluating learning, and a variety of teaching strategies and skills in technology education. Includes a public school teaching experience. Prerequisite: TEDU 195.

**TEDU 396 - Program Planning and Implementation (3)**
Design and evaluate technology-based instruction and curriculum for meeting student needs. Facility planning, program planning, and trends in technology education are explored. Includes a public school teaching experience. Prerequisite: TEDU 395.

**TEDU 403 - Technological Enterprise (3)**
Presents the relationship between technology and the corporate sector. Emphasizes organization, management, operation, and impact of a technological enterprise. Laboratory experiences include organizing, staffing, and operating a student-managed enterprise. Includes laboratory activities. Prerequisite: CM 106 or TDPT 105 or TEDU 102, TEDU 108.

**TEDU 410 - Capstone Experience in Technology (3)**
A technological product, process, or system is studied. Conduct in-depth research on an approved topic related to technology. Results of the research are formally presented to peers and faculty. Prerequisite: junior standing.

**TEDU 490 - Study in Technology (1 TO 3)**
Personal or group study of a technology that is not emphasized in other courses. A total of 3 credits may be earned.

**TEDU 492 - Organization and Coordination of Career and Technical Education (3)**
The organizational structure, responsibilities, and roles recognized in the operation of career and technical education programs. Major emphasis on state functions.

**THEA - THEATRE**

**THEA 100 - Introduction to Theatre (3)**
A University Core Curriculum course that surveys plays selected from the major periods of dramatic productivity from the ancient Greeks through contemporary times and the historical and social elements that helped to shape them. Introduces students to an understanding and appreciation of the many faces of dramatic creativity. Core Transfer Library: Fine Arts (IFA 1302) Open only to students not majoring in theatre.

**THEA 102 - Branding and Marketing for the Theatre and Dance Artist (1)**
Overview of the various personal branding and marketing skills and applications necessary to prepare theatre and dance students for professional internships and post-graduate employment. Areas covered will include digital presence/portfolio, theatre/dance cover letters, résumés, and head-shots, and other branding and marketing approaches specific to the discipline. Open only to theatre and dance majors and minors.

**THEA 103 - Aesthetics of Theatre 1 (3)**
Introduces the art and practice of theatre by examining a variety of analytical tools useful in analyzing and deriving meaning from any play. Covers theatre from the Greeks to
the English Restoration, exploring significant works as both written scripts and potential performances.

**THEA 104 - Aesthetics of Theatre 2 (3)**
Introduces the art and practice of theatre by examining a variety of analytical tools useful in analyzing and deriving meaning from any play. Covers theatre from the Neoclassical period to contemporary modern and postmodern plays, exploring significant works as both written scripts and potential performances.

**THEA 105 - Freshman Experience (1)**
Introduces departmental, collegiate, and university courses, programs, practices, and policies. Intended to assist transition to university life. Open only to theatre and dance majors.

**THEA 106 - Styles and Concept (3)**
Will increase students' understanding of theatrical styles and broad artistic concepts. Students will study design principles, demonstrate critical thinking, and creatively integrate their learning in the worlds of theatre and dance, gaining experience through manipulation of design elements as well as application of principles in individual and group presentations. Prerequisite: permission of the department chairperson. Open only to students in the design/technology concentration, directing/stage technician, or the teaching major in theatre.

**THEA 107 - Design Awareness for Theatre and Dance (3)**
A team-taught, practical study for the awareness of basic design elements, principles, and concepts and their creative integration into theatre and dance for the performer and technician. Students will gain experience through "hands on" manipulation of design elements as well as application of principles in major at-home projects. Open only to theatre and dance majors.

**THEA 123 - Elements of Theatrical Composition (3)**
A fundamental practical course to explore and apply basic principles and elements in theatrical composition. Students are trained in application of various elements of color, line, scale, texture, etc. to develop their visual skills. Enables the student to prepare for upper level design/tech courses. Prerequisite: permission of the department chairperson. Open only to theatre majors and minors.

**THEA 150 - Introduction to Theatre Education (3)**
Explores the theory and practice of teaching theatre in the middle and secondary schools and in alternative programs like professional theatres or museums which feature interpreters. Provides classroom opportunities for beginning theatre students to determine what it means to be a theatre teacher, using creative dramatics tools and applied theatre education mini-lessons to explore the world of the successful theatre educator. Prerequisite: permission of the department chairperson.

**THEA 207 - Design Awareness for the Non-Major (3)**
THEA 207 will increase students' understanding of theatrical design technologies. Students will study design principles, demonstrate critical thinking, and creatively integrate their learning in the worlds of theatre and dance, gaining experience through "hands on" manipulation of design elements as well as application of principles in individual and group presentations. Prerequisite: THEA 100 or DANC 100 or other THEA/DANC TIER 1 course. Not open to students who have credit in THEA 107. Open only to non-majors.

**THEA 220 - Stagecraft (3)**
A practical introduction to the fundamentals of the crafts involved in theatre production at the school, college, and community theatre levels. Prerequisite: permission of the department chairperson.

**THEA 221 - Technical Direction 1 (3)**
An introduction to the techniques and practices of technical direction for theatrical productions. Prerequisite: permission of the department chairperson.

**THEA 222 - Photoshop for Theatre (3)**
An introduction to the tools of Photoshop and how this program is applicable in a wide range of theatrical applications. Prerequisite: permission of the department chairperson.

**THEA 223 - Costume Design and Technology 1 (3)**
An introduction to the fundamentals of theatrical costuming with attention given to costume technology and construction. Prerequisite: permission of the department chairperson.

**THEA 224 - Costume Form and Materials (3)**
Exploration of the basic forms, materials, and concepts with emphasis on the three-dimensional human body. Also employs various media to develop experimental concepts and skills.

**THEA 225 - Theatrical Computer-Aided Drafting (3)**
Design studio emphasizing the basic principles and practices of technical theatre computer-aided drafting techniques. An introduction to two-and three-dimensional theatrical environments of scenic and light designs.
Prerequisite: permission of instructor. Open only to theatre and dance majors and minors.

THEA 226 - Stage Properties (3)
The examination of stage properties for theatrical production in many forms and styles. Emphasis is on technical theatre procedures including the analysis, production, and visualization of props within scenic design. Areas of concentration are analysis, research, understanding of materials, exploration of ideas, as well as craftsmanship. Prerequisite: THEA 220; permission of the department chairperson.

THEA 229 - Stage Makeup Design and Technology 1 (2)
An investigation of the principles, techniques, and materials of stage makeup and practical experience in their application. Prerequisite: permission of the department chairperson.

THEA 232 - Acting 1 (3)
A lecture-laboratory class stressing the basic principles of acting in combination with script analysis. Core Transfer Library: Fine Arts (IFA 1301) Prerequisite: permission of the instructor.

THEA 233 - Acting 2 (3)
A lecture-laboratory course on the principles of acting with major emphasis on character analysis and development. Prerequisite: THEA 232.

THEA 234 - Introduction to the Singing Actor (3)
Designed for beginning musical theatre students and those not already assigned to the musical theatre concentration. Students will gain a basic knowledge of musical concepts, voice development, performance skills, audition techniques, and musical theatre repertoire.

THEA 235 - Introduction to Shakespeare in Performance for the Non Major (3)
Will increase students’ understanding of the works of William Shakespeare as pieces of theatre that are to be performed. Students will study historical and theatrical context for understanding Shakespeare work as well as reading and viewing four of the plays to understand how the language can be taken from the page to the stage, creating vital, current, impactful theatre. Prerequisite: THEA 100.

THEA 250 - Directing 1 (3)
An introduction to the theories and practices of directing for the stage. Exercises in analysis, interpretation, staging, and collaboration. Prerequisite: THEA 103; permission of the instructor.

THEA 270 - Basic Musicianship 1 (2)
Training in music theory for musical theatre performers. Emphasizes keyboard skills, recognition and comprehension of complex melodic and rhythmic patterns, structural analysis of basic harmony and musical compositions, and study of musical vocabulary. Prerequisite: placement by level of experience; permission of the department chairperson. Parallel: THEA 271. Open only to musical theatre majors.

THEA 271 - Basic Musicianship 2 (2)
Continuation of THEA 270 including more advanced analysis, score study, melodic and rhythmic dictation, and listening. Prerequisite: THEA 270; permission of the department chairperson. Parallel: THEA 273. Open only to musical theatre majors.

THEA 272 - Sight Singing/Ear Training 1 (1)
Study and application of sight singing techniques as it pertains to musical theatre repertoire and industry standards. Additional focus includes melodic and rhythmic dictation, chord recognition, and related activities. Prerequisite: placement by level of experience; permission of the department chairperson. Parallel: THEA 270. Open only to musical theatre majors.

THEA 273 - Sight Singing/Ear Training 2 (1)
Continuation of Sight Singing/Ear Training 1 emphasizing variable minor and chromatic melodies as they pertain to musical theatre repertoire. Study of sight reading harmonic structures will also occur. Prerequisite: THEA 270; permission of the department chairperson. Parallel: THEA 271. Open only to musical theatre majors.

THEA 274 - Musical Theatre Ensemble (1)
Choral performing ensemble rehearsing twice a week. Study and performance of large ensemble works from musical theatre productions of all genres/eras. Prerequisite: THEA 271 and 273; permission of the department chairperson. Open only to musical theatre majors and musical vocal performance majors.

THEA 280 - Theatre and Dance Practicum (0 TO 1)
Intensive experience in theatre performance, dance performance, stage management, scenery and costume preparation, running crews, theatre management, and other production areas. Students should complete practicum in six different areas. Prerequisite: permission of the department chairperson. A total of 15 credits may be earned, but no more than 3 in any one semester or term.
THEA 291 - Theatre Stage Management (3)
An introduction to the artistic and organizational work of a stage manager. Emphasizing advanced problem-solving techniques and group organization dynamics along with professional standards for stage management forms, procedures, and protocols. Prerequisite: permission of the department chairperson. Open only to theatre and dance majors.

THEA 295 - Introduction to Teaching Methods for Theatre (3)
Theory and practice of teaching theatre in middle and secondary schools. Includes curriculum development, instructional planning, classroom management techniques, methods and strategies of instruction, assessment, and use of instructional aids and activities for the classroom. Prerequisite: THEA 220 and 232.

THEA 299X - Experimental/Developmental Topics (0 TO 12)
Topics relevant to the discipline. Course titles to be announced before each semester. A total of 12 credits may be earned.

THEA 317 - Pre-Modern Theatre History to 1700 (3)
Study of the theatre from its ancient origins up to 1700, with emphasis on the material conditions of theatrical production, dramatic/performance theory, and representative dramatic literature. Prerequisite: permission of the department chairperson.

THEA 318 - Advanced Topics in Theatre and Dance (3 TO 6)
In-depth study of special topics in theatre depending upon expertise of instructor. Topics may include dance, acting, musical theatre, directing, design, dramaturgy, Feminist theatre, etc. Prerequisite: permission of the instructor. A total of 12 credits may be earned, but topics may not be repeated, and a student may not earn more than 6 credits in any one semester or term.

THEA 319 - Modern Theatre History (3)
Study of theatre since 1700, with emphasis on the material conditions of theatrical production, dramatic/performance theory, and representative dramatic literature. Prerequisite: THEA 317; permission of the department chairperson.

THEA 320 - Scenic Design and Technology 1 (3)
A lecture-laboratory class to introduce the fundamentals of scenic design and technology. Emphasizes the development of technique and media competence. Prerequisite: permission of the department chairperson.

THEA 321 - Rendering for the Theatre (3)
Hands-on individual instruction in the processes and techniques of rendering theatrical designs. Emphasis placed on physical media such as graphite, charcoal, and/or paint. Prerequisite: permission of the department chairperson.

THEA 322 - Theatre of the 21st Century (3)
Study of the major works of theatre from 2000 to present, with emphasis on dramatic analysis, production conceits, major practitioners and companies, theory, and journalistic criticism. Preferable for students with junior or senior standing who have completed THEA 317 and 319. Prerequisite: THEA 103 and 104; permission of the instructor.

THEA 324 - Musical Theatre History (3)
Study of musical theatre history from its origins through the 21st century, with emphasis on groundbreaking productions and performances, significant individuals within the field, popular trends, and inherent characteristics of the genre. Prerequisite: permission of the instructor.

THEA 325 - Dramaturgy (3)
Dramaturgy introduces students to the various areas of production and new play dramaturgy, using extensive analysis, research, and writing to create a greater understanding of the process of dramaturgy. Prerequisite: THEA 103, 104; permission of the instructor.

THEA 326 - Lighting Design and Technology 1 (3)
Lecture-laboratory in the basic concepts, materials, hardware, and design principles of stage lighting. Emphasis placed on practical application of concepts and theory. Prerequisite: permission of the department chairperson.

THEA 327 - Sound Design and Technology 1 (3)
Lecture-laboratory in the basic concepts, materials, hardware, and design principles of sound for the stage. Practical laboratory work in sound implementation for university productions. Prerequisite: permission of the department chairperson.

THEA 328 - Voice Lesson (1 TO 2)
One private half-hour lesson, and 2-hour master class weekly (1 credit) or 60 minutes of lessons and a 4-hour master class weekly (2 credits). Students study musical theatre, Italian and English art song repertoire. Freshmen study contemporary musicals; sophomores study musicals of the 1960s-1980s; juniors/seniors study musical theatre repertoire from the early 1900s-1960s. Prerequisite: studio
assignments given by the musical theatre concentration coordinator. A total of 8 credits may be earned, but no more than 2 in any one semester or term. Open only to musical theatre concentration students.

THEA 329 - Costume History (3)
Exploration of the historical evolution of western dress from ancient times to the early 20th century, including costume terminology, period fashion, and a development of individual student design abilities. Prerequisite: permission of the instructor.

THEA 332 - Freshman Performance Lab (1)
Focus on basic knowledge of human anatomy as it pertains to the performer with particular attention to alignment, the development of core strength, and the release of unnecessary physical tensions. Prerequisite: permission of the department chairperson. Open only to theatre and dance majors.

THEA 333 - Introduction to Voice and Movement (2)
Introduction to the principles of movement and fundamentals of vocal and breathing techniques. Focus on assessing individual process and freeing of unnecessary habits in order to prepare for the athletic demands of stage acting. Prerequisite: THEA 232; permission of the department chairperson. Open only to theatre majors.

THEA 334 - Studio 1 (3)
Building on the alignment and anatomy information introduced in THEA 332, and the movement principles taught in THEA 333, this studio focuses on following physical and emotional impulse and understanding the circles of awareness. Prerequisite: THEA 332; permission of the department chairperson. Open only to theatre majors.

THEA 335 - Studio 2 (3)
Building on the alignment and anatomy information introduced in THEA 332, and the vocal production techniques taught in THEA 333, this studio focuses on combining vocal efficiency with text, along with additional emphases on the International Phonetic Alphabet and non-regional dialect. Prerequisite: permission of the department chairperson. Open only to theatre majors.

THEA 336 - Studio 3 (3)
Continuation of Studio 1, this course identifies the principles of supporting a character physically, with the technical understanding of the physical aspects of performance and their application through the creation of a score of physical action. Prerequisite: THEA 334; permission of the department chairperson. Open only to theatre majors.

THEA 337 - Studio 4 (3)
Continuation of Studio 2, this course focuses on incorporating these techniques with specific styles of theatrical performance. Emphasis on text work, including heightened and classical texts. Prerequisite: THEA 335; permission of the department chairperson. Open only to theatre majors.

THEA 338 - Studio 5 (3)
Advanced scene study, focusing on comedy. Genres may include Farce, Restoration, Comedy of Manners, Mask Work, and/or Commedia. Prerequisite: THEA 337; permission of the department chairperson. Open only to theatre majors.

THEA 339 - Studio 6 (3)
Advanced scene study focusing on ethnic theatre and non-theatrical texts. Prerequisite: THEA 337; permission of the department chairperson. Open only to theatre majors.

THEA 340 - Playwriting 1 (3)
Introduction to the art and craft of playwriting. Emphasizes plotting and the use of dramatic language in the writing of effective scenes, culminating in a one-act play. Prerequisite: permission of the instructor. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

THEA 341 - Acting Master Class (1)
Studio-based investigation into and application of various acting techniques with a focus on ensemble and scene work. Prerequisite: THEA 233. A total of 4 credits may be earned. Open only to theatre majors.

THEA 350 - Directing for the Stage 2 (3)
Practice in analysis, interpretation, staging, working with actors, and other aspects of stage direction with special reference to developing collaborative relationships. Prerequisite: THEA 250 or permission of the instructor.

THEA 352 - Topics in Directing (3)
Revolving special topics course with a semester-long focus in the theoretical and/or practical understanding of a given topic in directing. Possible topics include focused directing in a particular style of theatre; advanced actor training for the director; comparative studies of different directing approaches. A total of 6 credits may be earned, but no more than 3 in any one semester or term.
THEA 353 - Acting and Directing History (3)  
History of the major developments in the art of acting and directing from Ancient Greece to present day, including specific movements, theories, practitioners and productions, and the cultural context in which they arose. Prerequisite: THEA 317; permission of the instructor.

THEA 354 - Directing for Young Audiences (3)  
Study and practice in the art of directing theatrical productions geared towards young audiences. Prerequisite: THEA 250; permission of the instructor.

THEA 371 - Singing Actor 1 (2)  
The study of and performance of solo, duet, and small ensemble works for musical theatre. Preparation of roles and scenes will occur, combining the art forms of drama and music with an emphasis on developing, understanding, and incorporating the principles in Acting 1, 2, Basic Musicianship, Movement, and voice lessons. Prerequisite: THEA 274; permission of the department chairperson. Open only to musical theatre majors.

THEA 372 - Singing Actor 2 (2)  
Continuation of THEA 371 with emphasis on advanced repertoire choices, both in singing and acting technique demands. Prerequisite: THEA 371. Open only to musical theatre majors.

THEA 373 - Musical Theatre Scene Study (1)  
This course will connect acting and singing studios through the use of libretto scenes and their accompanying duets from multiple periods in musical theatre. Students will understand heightened realism in musical theatre and specify the physical and emotional world of the piece, and will learn how to bridge the gap between the spoken text and songs particular to this genre of performance. Prerequisite: permission of the department chairperson.

THEA 380 - Advanced Theatre and Dance Practicum (1 TO 9)  
Students design and execute a theatre or dance project; scenery designs, lighting, properties, theatre performance, dance performance, directing, oral interpretation, or house management. Prerequisite: 12 credits in theatre courses; permission of the department chairperson. A total of 9 credits may be earned. Open only to theatre majors and minors.

THEA 391 - Advanced Stage Management (3)  
Advanced study of all areas of the practice of stage management. Prerequisite: THEA 291.

THEA 392 - Topics in Stage Management (3)  
Focuses on taking a show from rehearsal to public performances: leading a team through the process of rehearsal, technical rehearsal and dress rehearsal to opening night. A major component of the class will focus on booking and calling several scripted pieces, movement pieces and musical scripts. Emphasis will be given to the technical rehearsal and dress rehearsal processes. Developing skills to integrate technical elements into the production through technical and dress rehearsals, using time effectively and dynamic problem solving. Prerequisite: THEA 291 and permission of the instructor of department chairperson.

THEA 396 - Teaching Methods and Administration of School Theatre Programs (3)  
Continues theory of teaching theatre in middle and secondary schools. Includes survey of texts, evaluation of content and instructional activities, and rationale for including theatre arts in school curriculum. Explores resources related to administration of extracurricular theatre programs. Topics include scheduling, budgets, fund raising, facilities, and rehearsal techniques. Prerequisite: THEA 395.

THEA 405 - Senior Experience (1)  
An exit class for all graduating seniors that coordinates their transition from undergraduate to professional or preprofessional programs and opportunities in theatre and dance. Prerequisite: permission of the department chairperson. Open only to theatre and dance majors.

THEA 420 - Scenic Design and Technology 2 (3)  
Advanced training and experience in scenic design and technology for theatrical productions. Emphasis placed on the techniques and tools a designer utilizes to implement their design. Prerequisite: THEA 320.

THEA 423 - Costume Design and Technology 2 (3)  
Advanced training and experience in costume design and technology for theatrical productions. Emphasis placed on the techniques and tools a designer utilizes to implement their design. Prerequisite: THEA 223.

THEA 426 - Lighting Design and Technology 2 (3)  
Advanced training and experience in lighting design and technology for theatrical productions. Emphasis placed on the techniques and tools a designer utilizes to implement their design. Prerequisite: THEA 326.

THEA 427 - Sound Design and Technology 2 (3)  
Advanced training and experience in sound design and technology for theatrical productions. Emphasis placed on
the techniques and tools a designer utilizes to implement their design. Prerequisite: THEA 327.

THEA 428 - Technical Direction 2 (3)
Advanced exploration of the techniques and practices of technical direction for theatrical productions. Prerequisite: THEA 221; permission of the department chairperson.

THEA 429 - Stage Makeup Design and Technology 2 (3)
Advanced training and experience in stage makeup design and technology for theatrical productions. Emphasis placed on the techniques and tools a designer utilizes to implement their design. Prerequisite: THEA 229.

THEA 430 - Studio 7 (3)
Advanced scene study course focusing on character and text analysis, as well as specialized vocal and physical techniques required for emotionally demanding and/or stylistic material. Prerequisite: permission of the department chairperson. Open only to theatre majors.

THEA 431 - Studio 8 (3)
Focus on camera technique for the actor. Text may include original material, screenplays, scripts, and new media considerations. Prerequisite: THEA 337; permission of the department chairperson. Open only to theatre majors.

THEA 432 - Studio 9 (3)
Advanced scene study incorporating choreographed combat. Areas of concentration may include unarmed combat, rapier and dagger and/or broadsword. Prerequisite: THEA 333; permission of the department chairperson. Open only to theatre majors.

THEA 433 - Studio 10 (3)
Focus on skills necessary for selection, preparation, and presentation of material appropriate for professional auditions. Topics may include: cold/ prepared readings, monologues, cattle calls, on-camera auditions, various contract specifics, agents, managers, headshots, resumes, and union information. Material chosen from wide selection of contemporary and classical texts. Prerequisite: THEA 430; permission of the department chairperson. Open only to theatre majors.

THEA 434 - Immersion Experience (1 TO 12)
Students may choose a creative or academic experience in theatre or dance. Written documentation of this immersion experience and proof of analytical/research/pre-production work will accompany the performance or final product. Topics must be pre-approved by advisor. Prerequisite: permission of the department chairperson. A total of 12 credits may be earned.

THEA 435 - Performance of Shakespeare (3)
A study of Shakespeare's works through analysis and performance. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned, but no more than 3 in any one semester or term.

THEA 450 - Directing for the Stage 3 (3)
Advanced practice in analysis, staging and collaborative process with special reference to working in various styles, periods, and modes of theatre. Prerequisite: THEA 350 or the equivalent; permission of the instructor.

THEA 491 - Theatre Management (3)
Study and practice in box office procedures, house management, publicity, and promotion as related to college, community, and professional theatres. Prerequisite: 9 credits of theatre courses.

THEA 496 - Directed Study in Theatre and Dance (1 TO 9)
Directed study of research and/or creative projects in design, playwriting, acting, directing or dance performance, meeting the approval of supervising faculty member(s). Prerequisite: permission of the department chairperson. A total of 9 credits may be earned. Open only to theatre and dance majors.

THEA 499 - Internships in Theatre and Dance (0 TO 9)
Intensive experience in the professional arena guided by artisans outside of Ball State University. Internships may be paid or unpaid, but must be in the student's area of focus (performance, directing, design, stage management, playwriting, and dramaturgy). Prerequisite: permission of the department chairperson. A total of 9 credits may be earned. Open only to theatre and dance majors.

VBC - VIRGINA BALL CENTER

VBC 400 - Immersive Learning Experiences ()

VBC 400A - ()
VBC 400B - ()
VBC 400C - ()
WELN - WELLNESS
WELN 325 - Community Collaboration and Service Learning in Wellness Management (3)
During this course, students assist in a community-based, professionally led wellness management project.

WGS - WOMEN'S & GENDER STUDIES
WGS 210 - Introduction to Women's and Gender Studies (3)
An introduction to Women's and Gender Studies, an interdisciplinary field focused on the ways that sex and gender manifest themselves in social, cultural, and political contexts. Discuss critical questions and concepts feminist scholars have developed as tools for thinking about gendered experience.

WGS 220 - International Women's Issues (3)
Introduction to current international women's and gender issues, such as women's/men's roles in work, politics, religion, families, and social movements, with an emphasis on non-Western cultures.

WGS 310 - Special Topics in Women's and Gender Studies (3)
Special courses developed by Women's and Gender Studies affiliated faculty. Course titles will be announced before each semester. May be repeated for different topics. A total of 9 credits may be earned, but no more than 3 in any one semester or term.

WGS 369 - Paid Internship (1 TO 6)
Supervised work in paid job settings in which students integrate job experiences with their acquired knowledge of women's studies. Involves assigned duties in an organization, agency, corporation, or business. Prerequisite: WGS 210; permission of the Women's and Gender Studies program director. A total of 6 credits may be earned.

WGS 410 - Feminist Theory (3)
Historical and contemporary survey of the women's movement and development of feminist theories within a social and political context. Liberal, existentialist, Marxist, socialist, psychoanalytic, radical, multicultural, global, ecofeminist, and postmodern schools of thought addressed in detail. Prerequisite: WGS 210; junior or senior standing.

WGS 479 - Unpaid Internship (1 TO 6)
Supervised participation in a mentorship relationship in which students gain work-related experience and apply acquired knowledge of women's studies. Involves voluntary participation in an organization, agency, corporation, or business. Prerequisite: WGS 210; permission of the Women's and Gender Studies program director. A total of 6 credits may be earned.

WGS 498 - Independent Study (1 TO 3)
Topics for independent study and research to be chosen and investigated in consultation with instructors with special competence in the topic involved. The credits may be accumulated in more than one semester. Prerequisite: permission of the Women's and Gender Studies program director. A total of 3 credits may be earned.

WGS 499 - Women's and Gender Studies Capstone (3)
Students will develop and reflect upon their own intellectual framework for understanding our gendered environment, synthesize interdisciplinary knowledge, explore career possibilities, and complete an activist project that involves identifying and researching a social problem, participating in action to help alleviate that problem, and reflecting on personal development. Prerequisite: WGS 210 plus 9 credits of interdisciplinary women's and gender studies course work and permission of the program director.

WPP - WRITING PROFICIENCY PROG
WPP 392 - Writing Proficiency Examination (0)
May be used to satisfy the Writing Proficiency requirement. Eligible students will have earned at least 60 but no more than 89 credits and completed ENG 104 or 114 (or their equivalent) with a grade of C or better. May be attempted twice only and is offered on a credit/no credit basis. Prerequisite: ENG 104 or 114 (or equivalent); completed at least 60 but no more than 89 credits.

WPP 393 - Writing Proficiency Course (2)
Open to all eligible students to satisfy the Writing Proficiency requirement. Required of students who do not receive credit for WPP 392 after two attempts. Offered on a credit/no credit basis; credits are not applied to major, minor, or University Core Curriculum requirements. Prerequisite: ENG 104 or 114 (or equivalent); at least 60 credits.

WPP 394 - Writing Proficiency Seminar (1)
May be used to satisfy Writing Proficiency requirement by students who have earned at least 60 completed credits. Required of eligible returning students who have been inactive for at least one calendar year and have not received credit in WPP 392, WPP 394, or WPP 393. Provides intensive writing instruction to prepare students to write an essay under timed circumstances that is assessed similarly to WPP 392. Is offered on a credit/no credit basis. Prerequisite: ENG 104 or 114 (or equivalent)
with a grade of C or better; at least 60 completed credits by the first day of the semester within which the student wishes to attempt the seminar.

**WWIN - WORKPLACE WELLNESS**

**WWIN 201 - Improving Worker Wellbeing: A Multidisciplinary Approach (3)**

Many workplace issues influence worker wellbeing. Designed to introduce how workplace culture, safety, and occupational health policies, personal health-related decisions, and other related practices have the potential of influencing worker wellbeing.

**WWIN 305 - Introduction to Workplace Wellness Planning (3)**

Using a systematic planning model when developing programs is important for program success. This course introduces students to a logic-model driven planning approach and to the concept of health and productivity management. Prerequisite: WWIN 201.

**WWIN 310 - Workplace Wellness Administration (3)**

Improving the efficiency of administrative tasks and communication practices can greatly impact wellness management practice. Focuses on enhancing skills and technologies important for program administration. Prerequisite: WWIN 201.

**WWIN 396 - Civic Engagement: Workplace Wellness Program (3)**

Students assist in an ongoing, community-based, professionally led workplace wellness program setting. A combination of class meetings and practical experience provides valuable insight into workplace wellness practices. Prerequisite: WWIN 305, 310.

**WWIN 397 - Civic Engagement: Workplace Wellness Project (3)**

Participants will assist with delivering a short-term wellness campaign to help improve awareness. Students will learn how these short-term campaigns are vital in bringing new people into wellness programs and have different goals than seen in the day-to-day operations of a wellness program. Prerequisite: WWIN 305, 310.

**WWIN 405 - Workplace Wellness Coaching (3)**

Introduces theory, skills, and techniques related to guiding groups and individuals through meaningful lifestyle changes by emphasizing motivational strategies and behavioral and holistic practices. Participants will be introduced to lifestyle assessments, wellness and lifestyle change models, and basic interviewing and referral skills.

**WWIN 496 - Seminar in Workplace Wellness (1 TO 6)**

Seminar topics will be identified, focusing on current issues in workplace wellness. Using the seminar format, will include research, discussion, and dissemination of information gathered in a given topic. A total of 6 credits may be earned.

**WWIN 498 - Senior Seminar in Workplace Wellness (1)**

Participants discuss issues, content, and practices encountered during their involvement in the workplace wellness minor. Open only to individuals who have completed all other requirements of the workplace wellness minor. Prerequisite: WWIN 396, 397.

**ZOOL - ZOOLOGY**

**ZOOL 330 - Structure and Development of Vertebrates (5)**

Comparative study of the anatomy, development, and evolutionary relationships of vertebrates. Lecture and laboratory. Prerequisite: BIO 112 and 214 or 215 or 216.

**ZOOL 347 - Animal Parasitology (3)**

Helminth, protozoan, and arthropod parasites of animals and humans. Emphasizes identification, life cycles, host-parasite relationships, and physiology of common species. Some emphasis on medical and clinical aspects of parasites in humans, and tropical forms. Prerequisite: BIO 111 or 112.

**ZOOL 432 - Invertebrate Zoology (4)**

Comparative morphology, physiology, ecology, life histories, and phylogeny of invertebrate animal phyla. Prerequisite: BIO 216.

**ZOOL 440 - Ornithology (3)**

The study of birds including identification, systematics, anatomy, physiology, life histories, ecological relationships, and conservation. Field work in addition to regular laboratory periods may be required. Prerequisite: BIO 112 or permission of the department chairperson.

**ZOOL 441 - Entomology (3)**

Anatomy, physiology, taxonomy, life histories, habits, and adaptations of insects. Prerequisite: BIO 111 and 112 or permission of the instructor.

**ZOOL 444 - Ichthyology (3)**

The study of fish with emphasis on identification, classification, anatomy and physiology, and ecology.
Emphasizes Indiana species, but other important species will be included. Prerequisite: BIO 216.

**ZOOL 445 - Herpetology (3)**
Introduction to the biology of amphibians and reptiles, including their origin, anatomy, physiology, classification, behavior, and ecology. Through extensive field trips, the laboratory will emphasize identification and observation of amphibians and reptiles in their natural habitats. Prerequisite: BIO 112.

**ZOOL 446 - Mammalogy (3)**
The evolutionary origin, characteristics, and distribution of recent mammals. The economic relationships of mammals. The collection and preservation of specimens. May require additional field work. Prerequisite: BIO 112 or permission of the department chairperson.

**ZOOL 465 - Fishery Resources Management (3)**
The relationship of fisheries to other natural resources; a survey of aquatic habitats and the characteristics of fish that affect their management; basic principles, practices, and techniques of management of inland waters for fish production. Prerequisite: BIO 216 or permission of the department chairperson.

**ZOOL 483 - Wildlife Biology (3)**
The identification, population dynamics, and geographic distribution of wildlife species with particular emphasis on those of the United States. The harvest and management of wildlife. May require additional field work. Prerequisite: BIO 216 or permission of the department chairperson.

**ZOOL 484 - Aquatic Entomology (3)**
Immature and adult stages of aquatic insects, including collecting techniques, identification, ecological requirements, morphology, and evolutionary adaptations to lentic and lotic conditions. Emphasizes aquatic insects as indicators of environmental quality and stress. Prerequisite: BIO 216.
University Schools

BURRIS LABORATORY SCHOOL
D. Miller, Principal; V. Edwards, Assistant Principal; A. Comber, Assistant Principal
burrlab.bsu.edu/

Burris Laboratory School was established in 1929, as part of Teachers College, Ball State University. The school is named after Dr. Benjamin Burris, Dean of Teachers College, Ball State University at the time of the construction of the school.

Burris Laboratory School’s mission is to foster a culture of respect and trust where every student is challenged to pursue excellence by engaging in a well-rounded, technologically-enhanced, rigorous curriculum in a safe and secure environment. As a model school, engaged in best-practice research and the preparation of highly effective educators, we collaborate with community partners to prepare students for success in an ever-changing world.

The school enhances their students’ critical thinking, problem-solving and technological skills through design thinking and Project Lead the Way. Along with a strong focus on related arts and athletics, Burris students excel academically, physically, artistically, and musically in an inclusive, safe environment.

Burris is fully accredited by AdvancED and the State of Indiana.

INDIANA ACADEMY FOR SCIENCE, MATHEMATICS, AND HUMANITIES
Vickie Barton, Executive Director
www.bsu.edu/academy

The Indiana Academy for Science, Mathematics, and Humanities is a residential school for three hundred of Indiana’s most academically gifted high school juniors and seniors. The Academy also has approximately 25 local students enrolled through the Academy’s non-residential program and approximately 15 international students. A rigorous curriculum is required for all students. The academic program gives students the opportunity to experience advanced elective courses from Academy’s curriculum as well as the university’s. Students can also pursue individualized research and experiential education opportunities. They are required to “give back” by earning service hours through work in both the Indiana Academy and the larger community.

The Indiana Academy also offers outreach programs that serve students and teachers outside of the Academy. Several advanced distance learning classes are offered for students in Indiana, the United States, and throughout the rest of the world. Each summer, under the auspices of the College Board, the Academy hosts an Advanced Placement Summer Institute for around 300 teachers studying to be Advanced Placement teachers. Throughout the school year and summer, the Academy offers Enrichment Programs and summer camps (both day and residential) for students from elementary through high school.
Accreditation

Ball State University is accredited by the Higher Learning Commission, the National Architectural Accrediting Board, the American Society of Landscape Architects, and the American Speech-Language Hearing Association.

The Department of Chemistry Curriculum is certified by the Committee on Professional Training of the American Chemical Society.

All initial educator preparation and licensing programs are accredited by the Indiana Department of Education and the Council for the Accreditation of Educator Preparation (CAEP). All advanced educator preparation programs are accredited by the Indiana Department of Education.

Programs in the College of Fine Arts are accredited by the National Association of Schools of Art and Design, the National Association of Schools of Music, and the National Association of Schools of Theatre, and the National Association of Schools of Dance. The David Owsley Museum of Art is accredited by the American Alliance of Museums.

The Child Study Center is accredited by the National Association for the Education of Young Children.

The interior design major and the fashion apparel design major are accredited by the National Association of Schools of Arts and Design (NASAD). FCS teacher education program meets the academic requirements for the initial teaching license and the Higher Learning Commission.

The technology and engineering teacher education program is accredited by the CAEP.

The Department of Construction Management and Interior Design has two accredited programs. The construction management major is accredited by the American Council on Construction Education (ACCE). The interior design major is accredited by the Council of Interior Design Accreditations (CIDA).

The doctoral degree in counseling psychology is accredited by the American Psychological Association. The master’s degree in rehabilitation counseling is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

The baccalaureate program in the School of Nursing is accredited by the Indiana State Board. The baccalaureate degree in nursing, master’s degree in nursing, and Doctor of Nursing Practice programs at Ball State University are accredited by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org).

The athletic training major in the School of Kinesiology is accredited by the Commission on the Accreditation of Athletic Training Education. The health and physical education teaching major is accredited by Council for the Accreditation of Educator Preparation (CAEP).

The Department of Nutrition and Health Science has several accredited programs. The Didactic Program in Dietetics and the Dietetics Internship Program maintain separate accreditations by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), a division of the Academy of Nutrition and Dietetics. The Health Education and Promotion Program is accredited by the Society for Public Health Education/American Association for Health Education Baccalaureate Program Approval Committee (SABPAC). The Radiography Program is accredited by the Joint Review Committee on Education in Radiology Technology (JRCERT). The Respiratory Therapy program is accredited by the Commission on Accreditation for Respiratory Care (CoARC).

The Department of Social Work is accredited by the Commission on Standards and Accreditation of the Council on Social Work Education.


The program in urban planning is accredited by the Planning Accreditation Board of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning.

The Miller College of Business is accredited by the AACSB International (The Association to Advance Collegiate Schools of Business), except for the programs in apparel design and fashion merchandising, computer technology, hospitality and food management, and residential property management.

The accounting programs, undergraduate and master’s, hold supplemental accreditation form the AACSB International. The clinical program affiliates for the major in medical technology are accredited by the National Accrediting Agency for Clinical Laboratory Sciences. The Department of Journalism is accredited by the Accrediting Council on Education in Journalism and Mass Communications. The public relations programs are Certification in Education for Public Relations (CEPR) accredited by the Public Relations Society of America. The Center for Medical Education is accredited as a part of the Indiana University School of Medicine by the Liaison Committee on Medical Education, Association of American Medical Colleges.
The Legal Studies program offered through the Political Science department is approved by the American Bar Association.

The Counseling Center is accredited by the International Association of Counseling Services, and its internship training program is accredited by the American Psychological Association.

The university also holds membership in many professional organizations, including the American Association of State Colleges and Universities, American Council on Education, American Association of Colleges for Teacher Education, Council for Advancement and Support of Education, Council of Graduate Schools in the United States, National Collegiate Honors Council, National University Continuing Education Association, and the College Entrance Examination Board, and the Southern Regional Education Board, and the Association of Collegiate Schools of Architecture.

Health Science is accredited by SABPAC = Society for Public Health Education (SOPHE) and American Association for Health Education (AAHE) Baccalaureate Program Approval Committee. The respiratory therapy program is accredited by the Commission on Accreditation for Respiratory Care (CoARC).

The Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).