

## UNDERGRADUATE

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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.

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## GENERAL

## INFORMATION

## HISTORY OF THE UNIVERSITY


#### Abstract

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

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Ball State University is an innovative, supportive academic community that inspires students by:
    - Offering action-oriented learning, including immersive out-of-class experiences, research, and study-abroad;
    - Providing extraordinary access to and collaboration with professors who create scholarship to advance
    knowledge, improve teaching, and transform learning; and
    - Engaging state, national, and international communities to enhance educational,
    economic, and cultural development.
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## 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 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) 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 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 800-4824BSU; 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 is 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 online 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 $\$ 55$ nonrefundable application fee. Applicants must pay a $\$ 55$ 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 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) certificate. Transcripts or GED/TASC 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. Applicants under the age of twenty-three must take the Scholastic Assessment Test (SAT) and/or the American College Testing Assessment (ACT). 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.

## Campus Housing

All students must live in university housing for two semesters unless they will be twenty-one years of age prior to the beginning of the term for which they are enrolling, have 24 or more Ball State accepted credits achieved after graduation from high school, are married or are a custodial parent of a dependent child, or are living with their parents in the parents' primary residence which is no more than sixty miles from the Ball State University campus.

When applying for admission, please indicate housing plans for the semester or term for which application is made. Admission to the university guarantees housing to entering freshmen.

## Students with Previous College Experience (Transfer Students)

Applicants who have previously attended post-secondary institutions, after high school graduation, should follow the same application procedures and observe the same deadlines as students with no college experience.

## 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 finalized during a meeting with an academic advisor. Official Ball State University course equivalents will be established by the academic advisor 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 the Registrar. This application can be found at bsu.edu/admissions/apply, scrolling to "Steps for Other Students" and selecting "Re-enrolling or Reinstating". 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. Students must submit official transcripts for any work completed at other institutions to the Office of the Registrar. Applicants seeking reenrollment after attending other academic institutions must be in good academic standing and eligible to return immediately to the institution last attended.

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, a reinstatement narrative, found at bsu.edu/registrar, (under Registration Activities and click to returning student and official transcripts,) if another institution was attended during the stop out period.

All documentation must be submitted to the Committee of Admission and Credits, Office of the Registrar, no later than 7 days before the official start of each term. For a list of important dates, please visit the Registrar's website at bsu.edu/registrar - click on Registration activities and select returning student. 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 Rinker Center for International Programs. 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-including tuition, fees, books, supplies, maintenance (lodging and food), health insurance, taxes, and miscellaneous expenditures (clothing, local travel, recreation, toiletries, telephone, etc.).

A student intending to enroll at Ball State University may be required to retake the TOEFL or IELTS before being admitted, regardless of the extent of previous training in English. Any exceptions to these rules must be approved by the Rinker Center for International Programs. For information about this program contact TOEFL at toefl.org or IELTS at ielts.org. Test results must be submitted to the university before a candidate's application can be processed.

Any student admitted conditionally with a score lower than 550 (paper-based)/79 (internet-based) on the TOEFL or 6.5 on the IELTS will be required to take an English language proficiency exam during orientation to determine the English language courses
that must be taken through the Intensive English Institute. Upon completion of the IEI program, the students must pursue full time academic study. Exceptions to these rules must be approved by the Rinker Center for International Programs and the Intensive English Institute. Any international student may take a course in English as a foreign language, for credit or noncredit, regardless of whether such a course is required. Any student who is required to take a course in English as a foreign language 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. Before completing their course work in the Intensive English Institute, students are required to pass a test of their proficiency in English.

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 paid at the time of registration and must be maintained throughout the student's period of enrollment at the university.

Upon arrival at Ball State, students attend special orientation sessions 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 the Rinker Center for International Programs or by visiting bsu.edu/internationaladmit. 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.
- Curriculum patterns and grade trends in the above courses-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/ACT scores are weighed in relation to high school grades and are used to identify particular strengths or weaknesses in students’ preparation for college. Scores weigh more heavily in selection for Honors College admission and Presidential Scholarship consideration. (Ball State superscores, which means we take the best score from each section for a final score.)


## 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 and standardized test scores 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 online at my.bsu.edu. Enrollment Confirmation instructions can be found in the student's admission packet. 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 paid the 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 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/admissions/apply, scrolling to "Steps for Other Students" and selecting "Guests" and click the box "Apply Now." Students must submit official college transcripts to the Office of the Registrar.

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 the Registrar 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/admissions/apply, scrolling to "Steps for Other Students" and selecting the tab "Apply as a Non-degree student." Students must submit official high school transcripts, the General Education Development (GED) certificate and/or Test Assessing Secondary Completion (TASC) certificate, or college transcripts. Applicants must have earned a high school diploma or GED/TASC 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 regular or online admissions, you must have 24 transferable credits from another institution to be admitted as a non-degree seeking students. 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 31. In addition, students will be subject to all university policies and regulations, including those pertaining to academic probation and dismissal.

Changing to Degree Status. Students in good academic standing at the conclusion of the semester in which they have completed 20 semester credits may apply for regular admission. If admitted, students will be eligible to pursue degrees. At any time during nondegree enrollment, students may submit the required materials to be considered for admission 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 Registration and Academic Progress. 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 Registrar, Lucina Hall, Room B43, 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, however, 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 AND SCHOLARSHIPS

The staff members in the Office of Scholarships and Financial Aid 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 March 10. Students are encouraged to apply electronically at fafsa.gov. For more information, contact the Office of Scholarships and Financial Aid at 800-227-4017 or 765-285-5600 or visit bsu.edu/finaid.

## Degree Requirements and Time Limit

## DEGREE REQUIREMENTS

Degree requirements are those in effect on the date of a student's first registration for credit after admission. Students may, however, choose to complete a particular major, minor, or two-year program under the requirements of the most recent catalog. Students who change a major, minor, or two-year program must meet the requirements of the new program as stated in the catalog current when the change is made.

## 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:

| $A=4.000$ | $B+=3.333$ | $C+=2.333$ | $D+=1.333$ | $F=0$ |
| :--- | :--- | :--- | :--- | :--- |
| $A-=3.667$ | $B=3.000$ | $C=2.000$ | $D=1.000$ |  |
|  | $B-=2.667$ | $C-=1.667$ | $D-=0.667$ |  |

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 $F S$.

A failing grade ( $F, F N$, or $F S$ ) 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 of college dean, the reasons for withdrawing from the course are such that the student should have a $W$.
$\mathbf{C R}$ is recorded for students registered under credit/no credit provisions who do work that is 2.0 or above.
$\mathbf{N C}$ 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. $C R / N C$ 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 data 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 Registrar's Office will send an email reminder to the student and to the instructor of an $I$ grade on the student record on or about the $15^{\text {th }}$ 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 $N R$ 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 $N C$ if it is a credit or no credit course.

W represents an official withdrawal from a course.
Students who want to take courses without credit to apply toward a degree (auditors) sign waivers for the specific courses. 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 Registrar's Office. 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, it will not be counted in the fifteen-credit allowance. Students who have taken a course for a grade cannot take it 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 Registration and Academic Progress 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 Registration and Academic Progress, 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 an 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 Committee on Admissions and Credits by the appropriate date established by the Registrar's Office. The request cannot be presented to the Committee on Admissions and Credits if a "university hold" has been placed on all student records 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.

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. Normally, 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 Committee on Admissions and Credits 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, gradepoint 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 Registrar's Office.

## 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 $N C$. This policy will apply 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.

## COURSES

## 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. 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 Distance Education 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 extended 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.

## Class Attendance

A student's official course program 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."

## 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.

## 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.

## 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 sixth to the forty-fifth day of classes in a semester;
- from the sixth 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 Bursar Office if there are questions on fees and course withdrawal.

## 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.

Students should contact the Bursar Office if there are questions on fees and course withdrawal.

## 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 the Associate Dean of Students/Title IX Coordinator, AD 238, 765-285-1545. Students enrolled exclusively in 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 Office of the Associate Dean of Students/Title IX Coordinator.

| Percent Refunded |  |  |  |
| :---: | :---: | :---: | :---: |
| Withdrawal <br> During Week | Weeks in a Semester, Session <br> or Term |  |  |
|  | $\mathbf{1 6}$ | $\mathbf{1 0}$ | $\mathbf{5}$ |
| $\mathbf{1}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{9 0 \%}$ | $\mathbf{7 5 \%}$ |
| $\mathbf{2}$ | $\mathbf{8 0 \%}$ | $\mathbf{7 0 \%}$ | $\mathbf{4 0 \%}$ |
| $\mathbf{3}$ | $\mathbf{6 0 \%}$ | $\mathbf{5 0 \%}$ | $\mathbf{0 \%}$ |
| $\mathbf{4}$ | $\mathbf{5 0 \%}$ | $\mathbf{3 0 \%}$ |  |
| $\mathbf{5}$ | $\mathbf{4 0 \%}$ | $\mathbf{1 0 \%}$ |  |
| $\mathbf{6}$ | $\mathbf{3 0 \%}$ | $\mathbf{0 \%}$ |  |
| $\mathbf{7}$ | $\mathbf{2 0 \%}$ |  |  |
| $\mathbf{8}$ | $\mathbf{1 0 \%}$ |  |  |
| $\mathbf{9}$ | $\mathbf{0 \%}$ |  |  |


| Percent Refunded |  |  |
| :---: | :---: | :---: |
| Withdrawal <br> During <br> Day | Weeks in a <br> Workshop |  |
|  | $\mathbf{2}$ | $\mathbf{1}$ |
| 1 | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ |
| 2 | $\mathbf{7 5 \%}$ | $\mathbf{5 0 \%}$ |
| 3 | $\mathbf{5 0 \%}$ | $\mathbf{0 \%}$ |
| 4 | $\mathbf{2 5 \%}$ |  |
| 5 | $\mathbf{1 0 \%}$ |  |
| 6 | $\mathbf{0 \%}$ |  |

## GRADUATION

Students must apply for graduation. Application forms are available in the advising centers or online and must be submitted early in the appropriate school year, before the deadline printed on the back of the application form.

## 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.

## Online and Distance Education

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. The university strives to empower students with quality educational choices no matter where they are or what their work and family obligations are.

Ball State offers more than 70 online degrees and certificates, and students can choose from about 500 online undergraduate and graduate courses. The university also offers a few live, face-to-face graduate courses at locations in the Indianapolis area.

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

For more information, visit 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 Studies. Unpaid internship experiences are also available for students interested in gaining practical experience in graphic design, marketing, public relations, and/or hospitality management/event planning. For more information, call the Office of Student Life at 765-285-2621 or visit our Web site 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 Governement Association at 765-285-8631 or go to our website at 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 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 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 Health Center clinic, the Women's Center, and Physical Therapy. Each of these areas at the Health Center operates on appointment-based scheduling. Laboratory testing, x-ray services, and prescriptions, if required, are not covered. Prescriptions may be filled at the pharmacy in the Health Center which takes most insurance plans. Services are provided by a dedicated and experienced professional staff of physicians, nurse practitioners, and nurses who specialize in primary. The Health Center is also responsible for reporting compliance with vaccine requirements to the State of Indiana. All on-campus students must submit proof of 2 MMR (measles, mumps, rubella) vaccines, a diphtheria/tetanus vaccine within the past 10 years and sign a waiver regarding meningitis disease and/or vaccine.

## Multicultural Center

The Multicultural Center supports and advances the university's commitment to cultural diversity by serving as a resource for the recruitment, retention and enrichment of students of color, promoting multicultural understanding through opportunities for crosscultural connections, and sustaining an inclusive environment for a diverse student population. Our programs and services address the co-curricular needs of all students and celebrate the historical contributions of diverse groups. For more information please visit our Web site at $\underline{b s u . e d u / m u l t i c u l t u r a l c e n t e r ~}$ 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. TechTime also offers Personalized Application Support, a service designed to help currently enrolled students who need software assistance with a Ball State project.

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: $\underline{b s u . e d u / u t s .}$

## University Libraries

Ball State University Libraries serves users by providing access to and assistance with resources to satisfy informational needs related to the university's teaching curriculum, research mission, and service programs. 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

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.

CardCat, the Ball State University Libraries' Web-based catalog of resources, is accessible via the Libraries' home page at bsu.edu/library. The Libraries also offer a mobile application for many research resources and services.

The home page also provides access to indexes of journal articles including full-text databases, course reserves, online tutorials, interlibrary loan, digital resources, library information and much more. OneSearch is a powerful tool for discovering resources in the Libraries' collections using a simple search box to simultaneously search many print and online collections. Assistance finding and using these resources 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 also available. Research guides for over 100 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. 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, and Pinterest for the latest buzz 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 $\underline{b s u}$.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, normally courses through the 202 level. By taking a placement exam, students may begin their studies at a level higher than the 101 level.

University Core Curriculum: Courses in the University Core Curriculum 36 crs
Foreign language: One foreign language
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 Architecture (B. Arch)

University Core Curriculum: Courses in the University Core Curriculum 36 crs
Concentration area: Courses in the major area of study 109 crs
This five-year degree requires a total of 154 credits.

## Bachelor of Athletic Training (BAT)

University Core Curriculum: Courses in the University Core Curriculum 36 crs
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 36 crs
Concentration area: Courses in the major area of study 85 crs
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 36 crs
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
or
Or

Two separate areas of emphasis of at least 18 credits each with each area approved by a department Two minors
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 | 115 crs |
| This five-year degree requires a total of 151 credits. |  |

## Bachelor of Music (BM)

University Core Curriculum: Courses in the University Core Curriculum 36 crs
Concentration area: Courses in the major area of study 90-94 crs
Electives: As many credits as needed to bring the total to 120

## 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, including the Ball State University Core Curriculum and 30 residence credits.

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.

## PREFIX NO SHORT TITLE

CREDITS

## General education, 31 credits



Students qualifying for exemption from ENG 103 or 104 will receive credit for the course(s). ENG 101 and 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:

## Degree

Chemical Technology
Criminal Justice and Criminology
Radiography

## Department

Chemistry
Criminal Justice and Criminology
Nutrition and Health Science

## 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

| 220 | Open Water Scuba | 2 |
| :--- | :--- | :--- |
| 221 | Advanced SCUBA Diver | 2 |
| 224 | Divemaster | 2 |
| 260 | Emergency Medical Responder | 3 |

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

## CERTIFICATE IN BEHAVIORAL STUDIES, 12 credits

PREFIX NO SHORT TITLE CREDITS

SPCE
280 Beh Analy Prin, Proc, and Phil 3
307 Ethical, Prof Prac Beh Analy 3
310 Application Consultation ABA 3
315 Advanced Behavior Analysis
3

12 crs
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

| PREFIX | NO | SHORT TITLE CRE | CREDITS |
| :---: | :---: | :---: | :---: |
| BIOT | 490 | Intro Recombinant DNA RNA Tech | h 3 |
|  | 491 | Theor and Apps Polym Chn React | 3 |
|  | 492 | Protein Isolation and Analysis | 3 |
|  | 493 | Prof Dev in Biot | 1 |
|  | 494 | Cell Culture Techniques | 2 |
|  | 495 | DNA Seqng and Bioinfors | 2 |
|  | 496 | Res Des and Present | 2 |
| 3-4 credits from |  |  |  |
| BIO | 446 | Applied Microbiology (3) |  |
|  | 448 | Biometry (3) |  |
|  | 452 | Advanced Genetics (3) |  |
|  | 453 | Human Genetic Problem Humanity (3) | (3) |
|  | 454 | Genomes: Genomics Proteomics (3) |  |
|  | 456 | Cancer Biology (3) |  |
|  | 457 | Molecular Biology (4) |  |
|  | 470 | Developmental Biology (4) | 3-4 |
| 1-6 credits from |  |  |  |
| BIO | 369 | Internship in Biology (1-6) |  |
|  | 394 | Practicum in Biology (1-3) |  |
|  | 498 | Undergraduate Research (1-3) | 1-6 |

BIO 215 is a prerequisite for the program. Students must earn a minimum grade of $C$ in all required courses.

## CERTIFICATE IN BUSINESS TECHNOLOGY,

 15 credits| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
| ISOM | 112 | Document Processing | 3 |
|  | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 340 | Multi and Web Publish for Bus | 3 |
|  |  | 12 crs |  |
| 3 credits from |  |  |  |
| CIS | 226 | Business Systems App Dev (3) |  |
| ISOM | 228 | Adv Micro Apps for Business (3) | 3 |
|  |  |  | 15 crs |

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

## CERTIFICATE IN DATA ANALYTICS, 32 credits

| PREFIX |  | NO | SHORT TITLE |
| :--- | :--- | :--- | :---: |$\quad$ CREDITS

Not open to computer science majors. Students must earn a minimum grade of $C$ in all required courses.

## CERTIFICATE IN ENTREPRENEURIAL MUSIC, 14 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| MGT | 241 | The Entrepreneurial Experience | 3 |
| MUSP | 495 | Performance Career Seminar 1 | 2 |
|  | 496 | Performance Career Seminar 2 | 3 |
|  | 497 | Capstone Entrepreneurial Music | 3 |
| 3 credits from |  |  |  |
| ACC | 200 | Accounting for New Ventures (3) |  |
| BUSA | 302 | Career Management (3) |  |
| FIN | 300 | Principles of Finance (3) |  |
| MGT | 342 | Marketing for New Ventures (3) |  |
|  | 343 | Venture Leadership (3) |  |
| MKG | 300 | Principles of Marketing (3) | $\underline{3}$ |
|  |  |  | 14 crs |

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

\section*{CERTIFICATE IN FACILITIES MANAGEMENT, 24 credits <br> | PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| ACC | 201 | Principles of Accounting 1 | 3 |
| FCFN | 210 | Customer Service | 3 |
| FCPM | 255 | Facilities Management | 3 |
|  | 305 | Maintenance for Prop Mgr | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
| MGT | 271 | Intro Organizational Behavior | 3 |
| TCST | 104 | Introduction to Construction | 3 |
|  | 180 | Construction Documents | 3 |
|  |  |  | 24 crs |}

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

## CERTIFICATE IN GIScience, 21 credits

PREFIX NO SHORT TITLE CREDITS
GEOG 240 Map Reading and Graphics 3
265 Intro Geographic Info Systems 3
340 Cartograp Visual Spatial Data 3
342 Introduction to Remote Sensing 3
9 credits from
GEOG 343 Advanced Remote Sensing (3)
344 Adv Geog Info Systems Analysis (3)
443 Sem Adv Techniq Remote Sensing (3)
444 Adv Cartog Visual Spatial Data (3)
445 GIS Apps Design and Develop (3)
448 Geog Information System Design (3) 9

## 21 crs

Students who select GEOG 444 should take GEOG 341 to meet the prerequisite. Students must earn a minimum grade of $C$ in all required courses.

## CERTIFICATE IN HUMANITIES AND ENTREPRENEURSHIP, 51-63 credits

The Certificate in Humanities Entrepreneurship combines a major in a humanities discipline from the College of Sciences and Humanities (CSH) with the Minor in Entrepreneurial Management from the Miller College of Business (MCOB) and seminar/workshop and career counseling preparation from the Career Center to facilitate the transition of CSH humanities graduates to employment and advancement in the corporate workplace. The transition is as much cultural as it is substantive. The interdisciplinary, multi-college curriculum and co-curriculum recognize that the preparation for a successful career begins with the first step after graduation, which may not be graduate school for all.

CREDITS


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

## CERTIFICATE IN INFANT/TODDLER SPECIALIZATION, 18 credits

## PREFIX NO SHORT TITLE CREDITS

| FCCD | 400 | Internship Child Dev (3-6) | 3 |
| :--- | :--- | :--- | :--- |
| FCFC | 202 | Child and Family Wellness | 3 |
|  | 310 | Promot Prosocial Behav Child | 3 |
|  | 315 | Infant Toddler Curr Envir | 3 |
|  | 320 | Leadership Mgt Child Dev Prog | 3 |
|  | 380 | Parenting | 3 |

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

## CERTIFICATE IN JOURNALISTIC VISUAL PRESENTATION, 15 credits

## PREFIX NO SHORT TITLE

CREDITS
JOUR 234 Design 1 3
241 Design 2 3
242 Programming Interactive Media 3
320 Media Art Dir Creative Process 2
323 Magazine Design 3
496 Creative Project: Graphics (1-6) 1

15 crs

Enrollment in the certificate is limited to students who have a major in advertising or public relations, or to those who have permission of the journalism department chairperson. Students must earn a minimum grade of $C$ in all required courses.

## CERTIFICATE IN SALES BOOT CAMP, 15 credits

## PREFIX NO SHORT TITLE <br> CREDITS

MKG 300 Principles of Marketing 3
325 Professional Selling 3
427 Sales Management 3
429 Sales Technology Application 3
Any ECON course
15 crs
Students must earn a minimum grade of $C$ in all required courses.

## CERTIFICATE IN SOCIAL SCIENCES ENTREPRENEURSHIP, 51-107 credits

The Certificate in Social Sciences Entrepreneurship combines a major in social sciences from the College of Sciences and Humanities (CSH) with the Minor in Entrepreneurial Management from the Miller College of Business (MCOB) and seminar/workshop and career counseling preparation from the Career Center to facilitate the transition of CSH science graduates from academic science to employment and advancement in the corporate (small or large) science. The transition is as much cultural as it is substantive. The interdisciplinary, multi-college curriculum and co-curriculum recognize that the preparation for a successful life in the social sciences begins with the first step after graduation, which may not be graduate school for all.

CREDITS

| 1) Satisfactory completion of a non-teaching major |  |
| :--- | :---: |
| in one of the following departments |  |
| Anthropology | $33-38$ |
| Criminal Justice and Criminology | 48 |
| Geography | $51-89$ |
| Political Science | $42-50$ |
| Psychological Science | 39 |
| Social Work | 69 |
| Sociology | 37 |
| Speech Pathology and Audiology | $62-66$ |
| Women's Gender Studies | 36 |

2) Satisfactory completion of the Minor in Entrepreneurial Management
(Miller College of Business)
3) Satisfactory completion of a Career Center program, consisting of an initial Career Center advising appointment, a minimum of seven (7) seminars and workshops (e.g., Orientation to the Professional Workplace, How to Write a Resume, Interviewing for Success, How to Make a Presentation,

Interview Skills Workshop, Skills Employers
Want, Marketing Your Certificate Program for Employment Success), the creation and revision of a professional resume, and successful completion of practice interviews.

0

345
346
430
438
447
455
456
499

Human-Computer Interaction (3)
Database Design (3)
Systems Programming (3)
Computer Graphics (3)
Network Security (3)
Data Mining (3)
Image Processing (3)
Independent Study (1-6)

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

## CERTIFICATE IN WEB SOFTWARE DEVELOPMENT, 26 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| CS | 120 | Computer Science 1 | 4 |
|  | 121 | Computer Science 2 | 4 |
|  | 124 | Discrete Structures | 3 |
|  | 222 | Advanced Programming | 3 |
|  | 310 | Web Programming | 3 |
| ENG | 397 | Multitier Web Architectures | 3 |
|  | 103 | Rhetoric and Writing | 3 |
|  | 104 | Composing Research | 3 |
|  |  |  | 26 crs |

Not open to computer science majors. 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. 269
Preaudiology-See Preaudiology, Department of Speech Pathology and Audiology, p. 252
Predental Preparation-See Predental Preparation, Department of Biology, p. 269
Pre-engineering-See Pre-engineering, Department of Physics and Astronomy, p. 362.
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.

## 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 wellbeing 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 21 st 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 90 but not more than 108 completed credits and have received not more than one NC grade for WPP 392 (Examination) may attempt WPP 394 (Writing Proficiency Seminar) one time. WPP 394 is a 1 credit course, and the credit does apply toward total credits.
Students who do not satisfy the Writing Proficiency requirement through successful completion of either WPP392 (Exam) or WPP 394 (Seminar) must receive a passing grade in WPP 393 (Writing Proficiency Course). WPP 393 is a 2-credit course, and the credits do apply toward total credits.

Students with baccalaureate degrees from accredited institutions who are pursuing a second baccalaureate degree from BSU are exempt from the Writing Proficiency Requirement.

## Foundations

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

PREFIX NO SHORT TITLE
CREDITS
ENG 103 Rhetoric and Writing (3)

Written Communication

104 Composing Research (3)
or
114 Composing Research (HC) (3)
ENG 101 and 102 substitute for ENG 103.

| Oral Communication |  |  |  |
| :---: | :---: | :---: | :---: |
| COMM | 210 | Fundamentals of Public Comm (3) | 3 |
| Mathematics |  |  |  |
| MATH | 125 | Quantitative Reasoning (3) |  |
|  | 132 | Brief Calculus (3) |  |
|  | 161 | Applied Calculus 1 (3) |  |
|  | 165 | Calculus 1 (4) |  |
|  | 201 | Num Oper Alg Reas Elem Teach (4) |  |
|  | 207 | Mathematics Exceptional Learn (4) | 3-4 |
| History |  |  |  |
| HIST | 150 | The West in the World (3) |  |
|  | or |  |  |
|  | 151 | World Civilization 1 (3) |  |
|  | and |  |  |
|  | 152 | World Civilization 2 (3) | 3-6 |
| HIST 151 and 152 substitute for HIST 150, which will satisfy the core foundation history requirement. |  |  |  |
| Physical Wellness |  |  |  |
| PFW | 100 | Physical Conditioning (2) |  |
|  | 101 | Physical Fit and Well Activity (1) |  |
|  | 102 | Physical Fit and Well Lecture (1) |  |
|  | 103 | Walking (2) |  |
|  | 104 | Jogging (2) |  |
|  | 105 | Adapted Physical Fit and Well (2) |  |
|  | 117 | Water Aerobics (2) |  |
|  | 148 | Aerobics (2) |  |
|  | 160 | Physical Fitness and Wellness (2) |  |
|  | 161 | Physical Fit Wellness Activity (1) |  |
|  | 162 | Physical Fit Wellness Lecture (1) |  |
|  | 217 | Swimming (2) | 2 |
| Personal Finance |  |  |  |
| FCS | 135 | Financial Literacy (1) |  |
| FIN | 101 | Pers Fin for Fiscal Wellness (1) |  |
|  | 110 | Personal Finance (3) | 1-3 |
| TIER 1 Domain |  |  |  |
| One course required from each category: |  |  |  |
| Fine Arts |  |  |  |
| AHS | 100 | Introduction to Art (3) |  |
|  | 101 | History of Art Survey 1 (3) |  |
| DANC | 100 | Intro to Dance History (3) |  |
| MUHI | 100 | Introduction to Music (3) |  |
|  | 139 | Perspectives of Jazz (3) |  |
|  | 330 | Music History (3) |  |
| MUST | 100 | Fundamentals of Music Theory (3) |  |
| THEA | 100 | Intro to Theatre (3) | 3 |
| Humanities |  |  |  |
| ANTH | 103 | Archaeology and Culture (3) |  |
|  | 111 | Anth, Culture, and Globalization (3) |  |
| AR | 102 | Beginning Arabic 2 (5) |  |
|  | 201 | Intermediate Arabic 1 (4) |  |
|  | 202 | Intermediate Arabic 2 (4) |  |
| CC | 101 | Word Origins and Vocab Dev (3) |  |
|  | 105 | Intro to the Classical World (3) |  |
| CH | 102 | Beginning Chinese 2 (4) |  |

ENG
206

TCOM 100
Natural Sciences
ANTH 105 Introduction Biological Anth (3)
ASTR 100 Intro Astro: Sol Sys and Bey (3)
BIO 100
111
112
CHEM 100
101
111
GEOG 101

HSC 160 Fundamentals of Human Health (3)
NREM 101 Environment and Society (3)
PHYC 100 Conceptual Physics (3)
101 Phys Sci Concepts for Teachers (1-3)
110 General Physics 1 (4)
120 General Physics 1 (5)
Social Sciences
ANTH 101 Intro to Cultural Anthropology (3)
CJC 101 Intro to Criminal Justice (3)
102 Introduction to Criminology (3)
COMM 240 Introduction to Human Comm (3)
290 Intercultural Communication (3)
ECON 116
201
247 Econ and Stats for the Media (3)

| GEOG | 150 | Global Geography (3) |
| :--- | :--- | :--- |
| HONR | 189 | Inquiries in Global Studies (3) |
| ISOM | 125 | Micro Apps for Business (3) |
| PLAN | 100 | Intro Urb Planning and Dev (2) |
| POLS | 130 | American National Government (3) |
|  | 293 | International Relations (3) |
| PSYS | 100 | Intro to Psychological Science (3) |
| SOC | 100 | Principles of Sociology (3) |
|  | 224 | Family and Society (3) |
|  | 242 | Social Problems (3) |
|  | 260 | Social Interaction (3) |

## TIER 2

One course required from each of 2 categories: Fine Arts/Design/Humanities

| AHS | 200 | Critical Perspect Contemp Art (3) |
| :---: | :---: | :---: |
|  | 201 | Art Criticism and Meaning (3) (W) |
| ANTH | 441 | Anthropology of Gender (3) (W) |
|  | 463 | Theor and Meth Hist Arch (3) (W) |
| ARCH | 229 | History of Architecture 1 (3) (W) |
| ART | 290 | Basic Art Media and Techniques (3) |
|  | 291 | Photography Intermedia Basics (3) |
| CAP | 200 | Design Thinking (3) |
| CC | 201 | Cultural Life Ancient Greece (3) (W) |
|  | 202 | Cultural Life Ancient Rome (3) (W) |
|  | 205 | Mythologies of the World (3) |
| CH | 334 | Chinese Culture and Civil (3) |
| COMM | 322 | Comm and Popular Culture (3) |
| DANC | 302 | Dance History 2 (3) (W) |
| EDRD | 320 | Disciplinary Literacy Elem Sch (3) |
| EDSE | 320 | Read Div Sec Cont Class (3) |
| ENG | 214 | Intro Lit and Gender (3) (W) |
|  | 215 | Intro African Amer Lit (3) (W) |
|  | 216 | Intro Amer Ethnic Lit (3) (W) |
|  | 217 | Intro Queer Lit Queer Theory (3) (W) |
|  | 402 | Cultural Studies (3) (W) |
|  | 405 | Spec Topics Creative Writing (3) (W) |
|  | 490 | Literature and Gender (3) (W) |
|  | 491 | Lit of African American Trad (3) (W) |
|  | 492 | Native American Literature (3) (W) |
|  | 493 | American Ethnic Literature (3) (W) |
|  | 494 | Queer Lit and Queer Theory (3) (W) |
|  | 498 | Studies in Global Literature (3) (W) |
| FR | 334 | Civ and Culture: Old Regime (3) |
|  | 335 | Civ and Culture: Modern France (3) |
|  | 360 | Intro to French Lit Readings (3) |
| GER | 361 | Survey of German Prose (3) |
| HIST | 198 | Non-Western Civilizations (3) |
|  | 310 | Intro History of US Business (3) |
|  | 370 | Foundations Asian Civilization (3) (W) |
|  | 421 | Am Indians in Colonial and US (3) (W) |
|  | 461 | Development Greek Civilization (3) (W) |
|  | 467 | Renaissance and Reformation (3) (W) |
|  | 486 | Russian Civilization to 1917 (3) |
| HONR | 202 | Middle Ages Renaiss Enlightnmt (3) (W) |
|  | 203 | Inquiries 19th 20th 21st Cent (3) (W) |
| JAPA | 334 | Japanese Culture and Civ (3) |
| LA | 221 | LA History 2 (3) |
|  | 270 | Environmental Systems (3) |
| MMP | 100 | Survey of the Music Industry (3) |


| MUHI | 105 | Mus and Pop Culture in America (3) |
| :---: | :---: | :---: |
|  | 107 | Rock and Roll in America (3) |
|  | 331 | Music History 2 (3) (W) |
| MUSE | 265 | Music Basics for the Classroom (3) (W) |
| PHIL | 102 | Intro to Critical Reasoning (3) (W) |
|  | 202 | Ethics (3) (W) |
|  | 203 | Social Philosophy (3) |
|  | 230 | Environmental Ethics (3) (W) |
|  | 240 | Society, Discipline, \& Control (3) (W) |
|  | 304 | Philosophy of Sport (3) (W) |
| RELS | 201 | Religion and Popular Culture (3) (W) |
|  | 206 | Sex and the Bible (3) (W) |
|  | 210 | Religion, Morality, Pub Debate (3) (W) |
|  | 250 | Biblical Interpretation (3) |
|  | 280 | Topics in Religion in America (3) |
|  | 290 | Hinduism (3) |
| SP | 335 | Topics in Hispanic Cultures (3-6) |
| TDPT | 280 | 3D Prototyping (3) |
| TEDU | 102 | Design Techniques (3) |
| TGRA | 184 | Comp Applications-Graphic Arts (3) |
|  | 286 | Digital Photography 1 (3) |
| THEA | 207 | Design Awareness for Non-Major (3) |
|  | 235 | Intro Shakespeare Performance (3) |
|  | 317 | Pre-Modern Theatre History (3) (W) |
| TMFG | 105 | Technical Design Graphics (3) |
| Natural Sciences/Social Sciences |  |  |
| ANTH | 231 | Intro Native American Studies (3) |
|  | 311 | Ethnicity and Race (3) |
|  | 401 | Hist Method and Theory in Anth (3) (W) |
| ASTR | 124 | The Solar System (3) |
|  | 126 | Blk Holes, Dark Matter, Univ (3) |
| BIO | 102 | Biol Concepts for Teachers (3) |
|  | 113 | Microbiology for Health Sci (5) |
|  | 216 | Ecology (3) |
|  | 220 | Ecological Issues 21st Century (3) |
| CHEM | 112 | General Chemistry 2 (4) |
|  | 200 | Society and Chemistry (3) |
| CJC | 311 | Race, Ethnicity and Gender (3) |
|  | 332 | Victimology (3) |
|  | 333 | Policing Free Diverse Society (3) |
|  | 341 | Community Corrections (3) |
|  | 350 | Criminal Evidence Procedure (3) |
| CS | 200 | Computers and Society (3) |
| ECON | 202 | Elementary Macroeconomics (3) |
|  | 279 | Problems of Emerging Nations (3) |
|  | 309 | Amer Econ Hist 1: to Civil War (3) |
|  | 310 | Amer Econ Hist 2: 1860-1990 (3) |
|  | 311 | Environmental Economics (3) (W) |
|  | 331 | Labor Economics (3) |
|  | 348 | Health and Economics (3) |
|  | 351 | International Economics (3) |
| EDFO | 420 | Soc, Hist, Phil Found of Ed (3) |
| EDMU | 205 | Intro to Multicul Ed (3) |
|  | 302 | Self and Social Const of ID (3) |
|  | 370 | Rep and Multicul Thry and Prac (3) |
|  | 400 | Top Sem in Multicul Stds (3) |
| EDTE | 355 | Lrn and Tchng w Emerging Tech (3) |
| FCFC | 250 | Family Relations (3) |
| GEOG | 265 | Intro Geographic Info Systems (3) |


|  | 270 | Geog of International Conflict (3) (W) |
| :---: | :---: | :---: |
| GEOL | 201 | Earth, Life, and Time (3) |
|  | 204 | Nat Landscape for Storytellers (3) |
|  | 206 | Oceans and Nations (3) |
| HONR | 199 | Contemp American Civilization (3) |
|  | 296 | Inquiries in Physical Sciences (3) |
|  | 297 | Inquiries in Earth Sciences (3) |
|  | 298 | Inquiries in Life Sciences (3) |
| HSC | 180 | Principles of Community Health (3) |
|  | 261 | Health, Sex, and Family Life (3) |
|  | 371 | Death and Dying (3) |
| NREM | 205 | Internatnl Natural Resources (3) |
|  | 211 | Water Resources (3) |
|  | 221 | Soil Resources (3) |
| PHYC | 151 | Energy: Technology and Society (3) |
| PLAN | 220 | Hist and Thry of Plan 1 (3) (W) |
| POLS | 431 | Congress (3) |
|  | 432 | The Presidency (3) (W) |
|  | 433 | The Judiciary (3) |
| PSYS | 324 | Psychology of Women (3) |
|  | 325 | Psych Prejudice Discrimination (3) |
|  | 424 | Psychology of Diversity (3) |
| SOC | 235 | Sociology of Gender (3) |
|  | 328 | Global and the Social World (3) |
|  | 333 | Sociology of Media (3) |
|  | 380 | Sociological Research Methods (3) (W) |
|  | 421 | Racial and Cultural Minor US (3) |
|  | 425 | Sociology of Law (3) |
| SOCW | 325 | Human Behav and Social Envr 2 (3) |
| TCMP | 300 | Sustainability in Info Tech (3) |
| TDPT | 406 | Technical Decision Making (3) |
| WGS | 210 | Intro Womens and Gender Stud (3) |
|  | 220 | International Womens Issues (3) |
| TIER 3 Course/Experience |  |  |
| One course required: |  |  |
| ACR | 418 | Ceramics: Senior Project (3) |
|  | 428 | Metals: Senior Project (3) |
|  | 438 | Senior Project in Glass (3) |
| ADS | 442 | Visual Communication 4 (3) |
| AFA | 487 | Senior Project in Drawing (3) |
|  | 489 | Senior Project in Painting (3) |
|  | 491 | Senior Project in Sculpture (3) |
|  | 493 | Senior Project in Printmaking (3) |
| AHS | 480 | Art History Senior Thesis (3) |
| AHSC | 485 | Respiratory Care Practicum 4 (6) |
| ANTH | 369 | Paid Internship in Anth (1-3) |
|  | 445 | Archaeological Field School (6) |
|  | 450 | Ethnographic Field School (3-12) |
|  | 459 | Ethnographic Methods (3) |
|  | 479 | Unpaid Internship in Anth (1-3) |
| AQUA | 479 | Aquatics Internship (12) |
| ARCH | 401 | Architectural Design (5) |
|  | 410 | Critical Practice (3) |
| ART | 480 | Senior Proj Photo Intermedia (3) |
|  | 490 | Senior Project in Animation (3) |
| AT | 461 | Clinical Education in AT 6 (2) |
| BIO | 315 | Methods in Cell Biology (2) (W) |
|  | 316 | Methods in Ecology (2) (W) |
| CC | 401 | Ancient Epic (3) |


| CH | 404 | Special Topics in Antiquity (3) |
| :---: | :---: | :---: |
|  | 401 | Contemporary Masterpieces (3) |
|  | 402 | Classical Masterpieces (3) |
| CHEM | 400 | Chemical Communications (1) (W) |
| CIS | 490 | Information Systems Integ Proj (3) |
| CJC | 471 | Practicum in CJC (3-6) |
|  | 495 | Capstone in Criminal Justice (3) |
| COMM | 369 | Professional Experience (1-6) |
|  | 412 | Rhetorical Thry and Criticism (3) (W) |
|  | 465 | Human Communication Inquiry (3) (W) |
|  | 479 | Practical Experience (1-3) |
| CS | 498 | Software Engineering 2 (3) (W) |
| ECON | 369 | Internship in Economics (1-6) |
|  | 424 | Econometrics (3) (W) |
| EMHS | 469 | Professional Practice (1-6) |
| ENG | 444 | Senior Seminar (3) (W) |
| EXSC | 479 | Exercise Science Internship (12) |
| FCPM | 400 | Housing and Society (3) |
| FCS | 403 | FCS in Practice (3) (W) |
| FL | 470 | Immersive Study Abroad (1-3) |
| FR | 403 | Seminar in French Literature (3-9) |
|  | 404 | Seminar in French Lang or Civ (3-9) |
|  | 470 | French Immersive Study Abroad (1-3) |
| GEOG | 369 | Professional Experience (3-6) |
|  | 448 | Geog Information System Design (3) |
|  | 479 | Practical Experience (3-6) |
| GEOL | 383 | Field Geology (6) |
| GER | 470 | German Immersive Study Abroad (1-3) |
| HIST | 369 | Public History Internship (3-12) (W) |
|  | 440 | Senior Research Project (1) (W) |
|  | 470 | Senior Seminar (3) (W) |
| HONR | 499 | Senior Honors Project (3) |
| HSC | 479 | Internship (6) |
| ID | 495 | Tier 3 Exp for BGS Students (1) |
| ISOM | 369 | Industry Internship (3-6) |
|  | 475 | Advanced Six Sigma (3) |
|  | 480 | Supply Chain Mgt Integ Project (3) |
| JAPA | 401 | Contemporary Masterpieces (3) |
|  | 470 | Japan Immersive Study Abroad (1-3) |
| JOUR | 369 | Paid Internship (0-12) |
|  | 479 | Unpaid Internship (0-3) |
| LA | 404 | LA Comprehensive Project (5) (W) |
| MATH | 496 | Capstone Math Teaching (3) |
|  | 498 | Senior Seminar (2) (W) |
| MGT | 491 | Bus Policy and Strategy Mgt (3) |
| MMP | 495 | MMP Project and Recital (3) |
| MUSE | 470 | Student Teaching in Music (7) |
| MUSP | 498 | Senior Recital (2) |
| MUST | 495 | Composition-Project Recital (1-3) |
| NREM | 369 | Professional Practice (1-3) |
|  | 405 | Integrated Resource Management (3) |
|  | 490 | Community Engagement in NREM (3) |
| NUR | 430 | Adult Health 4 (4) |
| NUTR | 425 | Nutrition Counseling Practicum (3) |
| PHIL | 400 | Immers Experiential Learning (1-6) |
| PHYC | 482 | Independent Studies in Physics (1-3) (W) |
| PLAN | 401 | Field Studio (4) |
| POLS | 369 | Pd Prof Exp in Amer Gov and Law (3) |
|  | 479 | Pract Exp Amer Gov and Law (3) |
|  | 480 | Access to Justice Clinic (3) |


|  | 499 | Sr Seminar in Gov and Pols (3) | EDRD | 430 | Assess Interven Read Lang Arts (3) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PSYS | 492 | Research Seminar (3) | ENG | 214 | Intro Lit and Gender (3) |
|  | 499 | Depart Honors in Psychology (1-2) |  | 215 | Intro African Amer Lit (3) |
| SOC | 492 | Capstone Course in Sociology (3) |  | 216 | Intro Amer Ethnic Lit (3) |
| SOCW | 460 | Social Work Practicum (12) |  | 217 | Intro Queer Lit Queer Theory (3) |
|  | 462 | Social Work Practicum Seminar (3) |  | 230 | Reading and Writing About Lit (3) |
| SP | 403 | Seminar in Culture Lit Studies (3-9) |  | 285 | Intro to Creative Writing (3) |
|  | 404 | Seminar in Lang and Ling (3-9) |  | 402 | Cultural Studies (3) |
| SPAA | 419 | Clinical Practicum (3) |  | 405 | Spec Topics Creative Writing (3) |
| SPCE | 438 | Advanced Seminar in ABA (3) |  | 444 | Senior Seminar (3) |
| SPTA | 479 | Sport Admin Internship (12) |  | 490 | Literature and Gender (3) |
| TCMP | 466 | Capstone Computer Technology (3) |  | 491 | Lit of African American Trad (3) |
| TCOM | 408 | Med Ethics Soc Responsibility (3) |  | 492 | Native American Literature (3) |
| TCST | 460 | Capstone in Construction (3) |  | 493 | American Ethnic Literature (3) |
| TDPT | 400 | Capstone in Technology (3) |  | 494 | Queer Lit and Queer Theory (3) |
| TGRA | 480 | Capstone for Graphic Comm (3) (W) |  | 498 | Studies in Global Literature (3) |
| THEA | 434 | Immersion Experience (1-12) | EXSC | 493 | Advanced Exercise Physiology (3) |
| TMFG | 460 | Project in CAM 1 (3) | FCS | 403 | FCS in Practice (3) |
| WGS | 499 | Wom and Gender Study Capstone (3) | FR | 302 | Composition (3) |
|  |  |  | GEOG | 270 | Geog of International Conflict (3) |
| Student Teaching: |  |  | GEOL | 350 | Physical Hydrology (3) |
| EDAL | 470 | Student Teaching: All-Grade (6-7) | GER | 302 | Composition (3) |
| EDEL | 400 | Student Teaching: Pre-K (6) | HIST | 369 | Public History Internship (3-12) |
|  | 401 | Student Teaching: Kindergarten (6) |  | 370 | Foundations Asian Civilization (3) |
|  | 402 | Student Teaching: Primary (6) |  | 371 | Tradition and Chng Modern Asia (3) |
|  | 463 | Student Teaching: Elementary (6) |  | 407 | US Civil War and Reconstruct (3) |
|  | 464 | Student Teaching: Elementary (6) |  | 415 | History of Indiana (3) |
|  | 465 | Student Teaching: Elementary (6) |  | 421 | Am Indians in Colonial and US (3) |
| EDJH | 465 | Elect Student Tchng: JH and MS (3 or 5) |  | 440 | Senior Research Project (1) |
| EDSE | 460 | Student Tchng: Sec Schl (6-7) |  | 461 | Development Greek Civilization (3) |
|  | 465 | Elective Student Teaching (3 or 5) |  | 462 | Development Roman Civilization (3) |
| SPCE | 466 | Stud Teach: Hearng Impd (1-12) |  | 467 | Renaissance and Reformation (3) |
|  | 489 | Stud Teach: Mild Disabilities (1-12) |  | 470 | Senior Seminar (3) |
|  | 491 | Stud Teach: Sec Mld Int (1-12) |  | 471 | France Since 1789 (3) |
|  | 492 | Stud Teach Children and Youth (6-12) |  | 495 | Modern China, 1600 to Present (3) |
|  |  |  | HONR | 202 | Middle Ages Renaiss Enlightnmt (3) |
| Writing |  |  |  | 203 | Inquiries 19th 20th 21st Cent (3) |
| One course required: |  |  | HSC | 290 | Eval and Assess in Hlth and PE (3) |
| AHS | 201 | Art Criticism and Meaning (3) |  | 396 | Health Comm Media Prod (2) |
| ANTH | 441 | Anthropology of Gender (3) |  | 487 | Applied Res Writ Eval Hlth Pro (3) |
|  | 401 | Hist Method and Theory in Anth (3) | ISOM | 249 | Foundations of Business Comm (3) |
|  | 463 | Theor and Meth Hist Arch (3) | JOUR | 104 | Strategic Writing (3) |
| AQUA | 458 | Aquatic Leadership Development (3) | LA | 404 | LA Comprehensive Project (5) |
| ARCH | 229 | History of Architecture 1 (3) | MATH | 395 | Teach Mathematics Secondary (3) |
| AT | 372 | Therapeutic Modalities in AT (3) |  | 498 | Senior Seminar (2) |
| BIO | 315 | Methods in Cell Biology (2) | MUHI | 331 | Music History 2 (3) |
|  | 316 | Methods in Ecology (2) | MUSE | 265 | Music Basics for the Classroom (3) |
| CC | 201 | Cultural Life Ancient Greece (3) | NEWS | 221 | Storytelling: Covering Issues (3) |
|  | 202 | Cultural Life Ancient Rome (3) | NREM | 331 | Energy and Mineral Resources (3) |
| CHEM | 400 | Chemical Communications (1) | PHIL | 102 | Intro to Critical Reasoning (3) |
| CJC | 309 | Juvenile Justice Delinquency (3) |  | 202 | Ethics (3) |
|  | 397 | Constitutional Issues in CJC (3) |  | 230 | Environmental Ethics (3) |
|  | 398 | Human Services in CJC (3) |  | 240 | Society, Discipline, \& Control (3) |
|  | 399 | Special Populations in CJC (3) |  | 304 | Philosophy of Sport (3) |
| COMM | 412 | Rhetorical Thry and Criticism (3) |  | 415 | Topics in Neurophilosophy (3) |
|  | 465 | Human Communication Inquiry (3) | PHYC | 482 | Independent Studies in Physics (1-3) |
| CS | 498 | Software Engineering 2 (3) | PLAN | 220 | Hist and Thry of Plan 1 (3) |
| DANC | 302 | Dance History 2 (3) | POLS | 281 | Econ Pol Prob of Emerg Ntns (3) |
| ECON | 311 | Environmental Economics (3) |  | 344 | Adv Legal Research and Writing (3) |
|  | 424 | Econometrics (3) |  | 382 | Govs and Politics of W Europe (3) |


|  | 432 | The Presidency (3) | TGRA | 480 | Capstone for Graphic Comm (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PSYS | 284 | Research Methods in Psych Sci (4) | THEA | 317 | Pre-Modern Theatre History (3) |  |
| RELS | 201 | Religion and Popular Culture (3) | WGS | 410 | Feminist Theory (3) | 3-5 |
|  | 206 | Sex and the Bible (3) |  |  |  |  |
|  | 210 | Religion, Morality, Pub Debate (3) |  |  |  | 36 crs |
| SCI | 396 | Using Sci Methods and Mats (3) |  |  |  |  |
| SOC | 380 | Sociological Research Methods (3) |  |  |  |  |
| SOCW | 250 | Human Behav and Social Envr 1 (3) |  |  |  |  |
| SP | 302 | Composition and Grammar (3) |  |  |  |  |
|  | 306 | Comp for Heritage Speakers (3) |  |  |  |  |
| SPTA | 345 | Sport Communication (3) |  |  |  |  |
| TCOM | 346 | Sales and Promotion Writing (3) |  |  |  |  |

## COURSE PREFIXES AND NUMBERS

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

ACC Accounting
ACE Athletic coaching education
ACR Art: crafts
ADS Art: design
AED Art: education
AFA Art: fine arts
AFR African studies
AHS Art: history
AHSC Allied health science
AMST American studies
ANAT Anatomy
ANTH Anthropology
APHY Applied physics
AQUA Aquatics
AR Arabic
ARCH Architecture
ART Art
ASIA Asian studies
ASTR Astronomy
AT Athletic training
BA Business analytics
BED Business education
BIO Biology
BIOT Biotechnology
BL Business law
BOT Botany
BUSA Business administration
CANS Canadian studies
CAP College: architecture and planning
CC Classical culture
CCIM College: communication, information, and media
CFA College: fine arts
CH Chinese
CHEM Chemistry
CIS Computer information systems
CJC Criminal justice and criminology
COMM Communication studies
CPSY Counseling psychology
CRPR Creative project
CS Computer science
CSHU College: sciences and humanities
DANC Dance
DISS Doctor's dissertation
DOC Doctoral candidate
ECON Economics
EDAC Education: adult and community
EDAD Education: administration
EDAL Education: all-grade
EDCC Education: community college
EDCU Education: curriculum

EDEL Education: elementary
EDFO Education: foundations
EDGE Education: general
EDHI Education: higher
EDJH Education: junior high/middle school
EDMU Education: multicultural
EDPS Educational psychology
EDRD Education: reading
EDSE Education: secondary
EDST Education: studies
EDSU Education: supervision
EDTE Education: technology
EMDD Emerging media design and development
EMHS Emergency management and homeland security
ENEF English as a foreign language
ENG English
ENIE English: intensive English institute
EURO European studies
EXSC Exercise science
FCCD Family and consumer sciences: child development
FCCL Family and consumer sciences: child life
FCED Family and consumer sciences: education
FCFA Family and consumer sciences: fashion apparel
FCFC Family and consumer sciences: family and child
FCFM Family and consumer sciences: fashion merchandising
FCFN Family and consumer sciences: foods and nutrition
FCFS Family and consumer sciences: family studies
FCGI Family and consumer sciences: general
FCID Family and consumer sciences: interior design
FCMR Family and consumer sciences: merchandising
FCPM Family and consumer sciences: property management
FCS Family and consumer sciences
FIN Finance
FL Foreign languages
FR French
GEOG Geography
GEOL Geology
GER German
GERO Gerontology
GRK Greek
HIST History
HONR Honors
HSC Health science
ICOM Icommunication
ICS Information and communication sciences
ID Interdepartmental
IEI Intensive English Institute
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
LA Landscape architecture
LAS Latin-American studies
LAT Latin
MAST Master's candidate
MATH Mathematical sciences
MBA Master of business administration
MEDT 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
PEP Physical education: professional
PFW Physical fitness/wellness
PHIL Philosophy
PHYC Physics
PHYS Physiology
PLAN Urban planning
POLS 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
TCMP Technology: computer technology
TCOM Telecommunications
TCST Technology: construction management
TDPT Technology: department
TEDU Technology: education
TGRA Technology: graphic arts management
THEA Theatre
THES Thesis
TMFG Technology: manufacturing
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.

## FOR MORE INFORMATION

Details about programs, financial aid, or other rules are available in the following publications:
Code of Student Rights and Responsibilities
Competency Credit Alternatives
Student Advising Handbook
For additional information about admission, transfer credit, etc., contact the Office of Admissions, 765-285-8300 or 800-482-4BSU; TTY users only 765-285-2205.

For more information about fees, contact the Office of the Bursar, 765-285-1643.
For more information about residency, contact the Office of the Registrar, 765-285-1722.

## 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.

## 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.

450 Reading and Independent Study (1-3) 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.
499 Selected Topics in American Studies (3-9) 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.

## 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.

## ENGLISH AS A FOREIGN LANGUAGE (ENEF)

101 Writing Fundamentals (1.5-3) 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.
102 Grammar Fundamentals (1.5-3) 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.

103 Reading Fundamentals (1.5-3) 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.
104 Oral Communication Fundamentals (1.5-3) 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.
105 Extensive Reading and Keyboarding 1 Fundamentals
(1.5-3) 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.

## 106 Vocabulary and Literacy Fundamentals (1.5-3)

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.
111 Writing Level 1 (1.5-3) 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.
112 Grammar Level 1 (1.5-3) 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.
113 Reading Level 1 (1.5-3) 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.
114 Oral Communication Level 1 (1.5-3) 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.
115 Extensive Reading and Keyboarding 2 Level 1 (1.5-3)
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.
116 Vocabulary and Literacy Level 1 (1.5-99) 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.
121 Writing Level 2 (1.5-3) 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.
122 Grammar Level 2 (1.5-3) 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.

123 Reading Level 2 (1.5-3) 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.
124 Oral Communication Level 2 (1.5-3) Through openended, 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.
125 Extensive Listening 1 Level 2 (1.5-3) 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.
126 Vocabulary and Literacy Level 2 (1.5-99) 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.
131 Writing Level 3 (1.5-3) 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.
132 Grammar Level 3 (1.5-3) 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.
133 Reading Level 3 (1.5-3) 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.
134 Oral Communication Level 3 (1.5-3) 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.
135 Extensive Listening 2 Level 3 (1.5-3) 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.
136 Vocabulary and Literacy Level 3 (1.5-99) 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.
141 Writing Level 4 (1.5-99) 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.
142 Grammar Level 4 (1.5-99) 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.
143 Reading Level 4 (1.5-99) 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.

144 Speaking Level 4 (1.5-99) 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.
145 Listening Level 4 (1.5-99) 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.
146 Vocabulary and Literacy Level 4 (1.5-99) 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.
151 Writing Level 5 (1.5-99) 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.
152 Grammar Level 5 (1.5-99) 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.
153 Reading Level 5 (1.5-99) 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.
154 Speaking Level 5 (1.5-99) 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.

155 Listening Level 5 (1.5-99) 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.
156 Vocabulary and Literacy Level 5 (1.5-99) 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.
161 Writing Level 6 (1.5-99) 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 wellorganized argumentative research paper of approximately 810 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.
162 Grammar Level 6 (1.5-99) 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.
163 Reading Level 6 (1.5-99) 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.
164 Speaking Level 6 (1.5-99) 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.
165 Listening Level 6 (1.5-99) 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.
166 Vocabulary and Literacy Level 6 (1.5-99) 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.
171 Repeating Writing (1.5-99) 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.
172 Repeating Grammar (1.5-99) 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.
173 Repeating Reading (1.5-99) 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.
174 Repeating Speaking (1.5-99) 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.

175 Repeating Listening (1.5-99) 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.

## 176 Repeating Vocabulary and Literacy (1.5-99)

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.

## ENGLISH: INTENSIVE ENGLISH INSTITUTE (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.

101 Writing Fundamentals (1.5-99) 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.
102 Grammar Fundamentals (1.5-99) 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.
103 Reading Fundamentals (1.5-99) 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.
104 Oral Communication Fundamentals (1.5-99) 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.

## 105 Extensive Reading and Keyboarding 1 Fundamentals

(1.5-99) 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.
106 Vocabulary and Literacy Fundamentals (1.5-99)
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.

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.
111 Writing Level 1 (1.5-99) 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.
112 Grammar Level 1 (1.5-99) 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.
113 Reading Level 1 (1.5-99) 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.
114 Oral Communication Level 1 (1.5-99) 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.

## 115 Extensive Reading and Keyboarding 2 Level 1

(1.5-99) 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.
116 Vocabulary and Literacy Level 1 (1.5-99) 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.
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.
121 Writing Level 2 (1.5-99) 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.
122 Grammar Level 2 (1.5-99) 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.
123 Reading Level 2 (1.5-99) 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.
124 Oral Communication Level 2 (1.5-99) Through openended, 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.
125 Extensive Listening 1 Level 2 (1.5-99) 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.
126 Vocabulary and Literacy Level 2 (1.5-99) 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.
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.
131 Writing Level 3 (1.5-99) 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.
132 Grammar Level 3 (1.5-99) 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.
133 Reading Level 3 (1.5-99) 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.
134 Oral Communication Level 3 (1.5-99) 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.
135 Extensive Listening 2 Level 3 (1.5-99) 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.
136 Vocabulary and Literacy Level 3 (1.5-99) 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.

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.
141 Writing Level 4 (1.5-99) 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.
142 Grammar Level 4 (1.5-99) 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.
143 Reading Level 4 (1.5-99) 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.
144 Speaking Level 4 (1.5-99) 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.
145 Listening Level 4 (1.5-99) 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.

146 Vocabulary and Literacy Level 4 (1.5-99) 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.
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.
151 Writing Level 5 (1.5-99) 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.
152 Grammar Level 5 (1.5-99) 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.
153 Reading Level 5 (1.5-99) 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.
154 Speaking Level 5 (1.5-99) 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.
155 Listening Level 5 (1.5-99) 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.

156 Vocabulary and Literacy Level 5 (1.5-99) 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.
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.
161 Writing Level 6 (1.5-99) 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.
162 Grammar Level 6 (1.5-99) 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.
163 Reading Level 6 (1.5-99) 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 (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.

164 Speaking Level 6 (1.5-99) 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.
165 Listening Level $6(\mathbf{1 . 5 - 9 9})$ 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.
166 Vocabulary and Literacy Level 6 (1.5-99) 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.

## 171 Writing for Graduate Students Level 6 (1.5-99)

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.

## INTENSIVE ENGLISH INSTITUTE (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.
101 Writing Fundamentals (1.5-99) 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.
102 Grammar Fundamentals (1.5-99) 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.
103 Reading Fundamentals (1.5-99) 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.

104 Oral Communication Fundamentals (1.5-99) 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.
105 Extensive Reading and Keyboarding 1 Fundamentals (1.5-99) 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.
106 Vocabulary and Literacy Fundamentals (1.5-99)
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.
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.
111 Writing Level 1 (1.5-99) 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.
112 Grammar Level 1 (1.5-99) 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.
113 Reading Level 1 (1.5-99) 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.
114 Oral Communication Level 1 (1.5-99) 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.

## 115 Extensive Reading and Keyboarding 2 Level 1

(1.5-99) 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.
116 Vocabulary and Literacy Level 1 (1.5-99) 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.
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.
121 Writing Level 2 (1.5-99) 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.
122 Grammar Level 2 (1.5-99) 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.
123 Reading Level 2 (1.5-99) 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.
124 Oral Communication Level $2(1.5-99)$ Through openended, 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.
125 Extensive Listening 1 Level 2 (1.5-99) 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.
126 Vocabulary and Literacy Level 2 (1.5-99) 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.
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.
131 Writing Level 3 (1.5-99) 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.
132 Grammar Level 3 (1.5-99) 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.
133 Reading Level 3 (1.5-99) 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.

134 Oral Communication Level 3 (1.5-99) 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.
135 Extensive Listening 2 Level 3 (1.5-99) 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.
136 Vocabulary and Literacy Level 3 (1.5-99) 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.
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.
141 Writing Level 4 (1.5-99) 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.
142 Grammar Level 4 (1.5-99) 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.
143 Reading Level 4 (1.5-99) 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.
144 Speaking Level 4 (1.5-99) 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.
145 Listening Level 4 (1.5-99) 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.
146 Vocabulary and Literacy Level 4 (1.5-99) 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.
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.
151 Writing Level 5 (1.5-99) 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.

152 Grammar Level 5 (1.5-99) 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.
153 Reading Level 5 (1.5-99) 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.
154 Speaking Level 5 (1.5-99) 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.
155 Listening Level 5 (1.5-99) 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.
156 Vocabulary and Literacy Level 5 (1.5-99) 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.
161 Writing Level 6 (1.5-99) 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 wellorganized argumentative research paper of approximately 810 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.
162 Grammar Level 6 (1.5-99) 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.
163 Reading Level 6 (1.5-99) 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.
164 Speaking Level 6 (1.5-99) 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.
165 Listening Level 6 (1.5-99) 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.
166 Vocabulary and Literacy Level 6 (1.5-99) 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.

## 171 Writing for Graduate Students Level 6 (1.5-99)

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.

## INTERDEPARTMENTAL (ID)

101 Freshman Seminar (1-2) 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.

300 Related Field Experiences (1-12) 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.
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.

369 New York Arts Program (3-16) 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.

## 399 Independent Study in Peace Studies and Conflict

Resolution (1-3) 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: 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.

400 Immersive Learning Experiences (1-15) 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.

## 401 Internship in Peace Studies and Conflict Resolution

(1-6) 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.

## 495 Immersive Experiences 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 form 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 Dean of University College.

Open only to BGS students.

## LATIN-AMERICAN STUDIES (LAS)

101 Introduction to Latin-American Studies (3) Overview of the history, development and current trends of LatinAmerican countries from conquest through present times, focusing on economic, sociological, and cultural tendencies including the recent Latino migrations to the United States.

400 Study Abroad (3-9) 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.

## NATIONAL STUDENT EXCHANGE (NSE)

399 National Student Exchange (12-17) 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.

## VIRGINIA BALL CENTER (VBC)

400 Immersive Learning Experiences (1-15) Designed specifically for approved immersive learning experiences administered by the Virginia Ball Center.

Prerequisite: permission.
A total of 15 credits may be earned.

## WRITING PROFICIENCY PROGRAM (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.

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.

394 Writing Proficiency Seminar (1) May be used to satisfy Writing Proficiency requirement by students who have earned at least 90 but no more than 108 completed credits and have not previously attempted either WPP 392 or WPP 393. Required of eligible returning students who have not previously attempted WPP 392 or WPP 393 and have been inactive for at least one calendar year. Provides intensive writing instruction to prepare students to write an essay under timed circumstances that is assessed similarly to WPP 392. May be attempted one time only and is offered on a credit/no credit basis.

Prerequisite: ENG 104 or 114 (or equivalent) with a grade of $C$ or better; completed at least 90 but no more than 108 completed credits by the first day of the semester within which the student wishes to attempt the course.

## THE ACADEMY FOR 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 $21^{\text {st }}$ 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| BIO | 216 | Ecology | 3 |
| ECON | 311 | Environmental Economics (3) |  |
|  | or |  |  |
| NREM | 203 | Decision-Making in Nat Res Mgt (3) | 3 |
| LA | 471 | Sustainable Land Systems | 3 |
| PHIL | 230 | Environmental Ethics | 3 |
| SUST | 400 | Creating a Sustainable Future | 3 |
|  |  |  |  |
| 9 credits from |  |  |  |
| ANTH | 312 | Ecological Dims of Culture (3) |  |
| ARCH | 498 | Spec Proj in Arch (3-6) |  |
| BIO | 418 | Comm and Ecos Ecol (3) |  |
| BOT | 480 | Plant Ecology (3) |  |
| GEOL | 207 | Environ Geology Geochem Cycles (3) |  |
| HIST | 204 | US Environmental History (3) |  |
|  | or |  |  |
| NREM | 204 | American Environmental History (3) |  |
| LA | 270 | Environmental Systems (3) |  |
| NREM | 205 | Internatnl Natural Resources (3) |  |
|  | 304 | Sustainable Agriculture (3) |  |
|  | 357 | Internat Community Development (3) |  |
| PLAN | 405 | Integrated Resource Management (3) |  |
|  | 433 | Environmental Planning (3) |  |
| POLS | 435 | Energy Planning (3) |  |
| ZOOL | 487 | Altern Sustainable Comm Plan (3) |  |
|  | 483 | Environmental Law and Policy (3) |  |
|  |  |  | 9 |

ECON 201 should be taken before ECON 311 as a University
Core Curriculum elective and to satisfy the prerequisite.
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, 765-2851135.

## MINOR IN SUSTAINABILITY, 21 credits

## PREFIX NO SHORT TITLE

CREDITS

| SUST | 250 | Intro to Sustainable Dev |
| :--- | :--- | :--- |
|  | 400 | Creating a Sustainable Future |

3
3
1 course from each of the following areas:

## Atmosphere \& Climate

GEOL 207 Environ Geology Geochem Cycles (3)

METC 230 Elementary Meteorology (3)
331 Global Climatology (3)
332 Climate Chng and Modification (3)
NREM 309 Human Dimensions Global Change (3) 3

## Land/Natural Systems

| BIO | 216 | Ecology (3) |
| :--- | :--- | :--- |
|  | 418 | Comm and Ecos Ecol |
| GEOG | 121 | Geog of Cultural Envi |
|  | 150 | Global Geography (3) |
| GEOL | 416 | Geology Hazards Envi |
| LA | 471 | Sustainable Land Syst |
| NREM | 221 | Soil Resources (3) |
|  | 304 | Sustainable Agricultur |
|  | 427 | Soil Conservation and |
|  |  |  |
| Resources (Water/Energy/Materials) |  |  |
| ARCH | 273 | Environmental System |


| ARCH | 273 | Environmental Systems 1 (3) |
| :--- | :--- | :--- |
| GEOL | 206 | Oceans and Nations (3) |
| LA | 371 | Sustainable Site Design (3) |
| NREM | 211 | Water Resources (3) |
|  | 331 | Energy and Mineral Resources (3) |
|  | 335 | Renewable Energy Sustain Tech (3) |
|  | 405 | Integrated Resource Management (3) |
| PLAN | 433 | Environmental Planning (3) |
|  | 435 | Energy Planning (3) |
| TDPT | 203 | Material Processing (3) |
|  | 204 | Energy Processing (3) |

## Socio-Cultural Dimensions of Sustainability

ANTH 312 Ecological Dims of Culture (3)
481 Cult, Econ, and Dev (3)
BUSA 300 Int Sustainability in Business (3)
ECON 311 Environmental Economics (3)
GEOG 423 Population Geography (3)
HSC 180 Principles of Community Health (3)
482 Environmental Health (3)
NREM 205 Internatnl Natural Resources (3)
309 Human Dimensions Global Change (3)
357 Internat Community Development (3)
PLAN 460 Altern Sustainable Comm Plan (3)
SOC 328 Global and the Social World (3)
355 Environment (3)
470 Population Dynamics (3)
SOCW 325 Human Behav and Social Envr 2 (3)

| Values/Policy |  |  |
| :--- | :---: | :--- |
| HIST | 204 | US Environmental History (3) |
| ID | 301 | Intro Peace Std and Conf Res (3) |
| NREM | 309 | Human Dimensions Global Change (3) |
| PHIL | 230 | Environmental Ethics (3) |
| POLS | 347 | Environmental Law and Policy (3) |
| TDPT | 406 | Technical Decision Making (3) |

21 crs with the opportunity to critically analyze data and prepare

## 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.

## 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.

## 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 studentsreports.
Prerequisite: SUST 320 or by permission of advisor or instructor.

Open only to students with permission of advisor or instructor.

## 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.

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 longterm success of that system.

## AFRICAN AMERICAN STUDIES

The African American Studies minor 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 History at 765-285-8700.

MINOR IN AFRICAN AMERICAN STUDIES, 16 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| HIST | 210 | Introduction to Black History | 3 |
|  | 410 | African Amer Studies Capstone | 1 |
| ENG | 215 | Intro African Amer Lit | 3 |
|  |  |  |  |


| ARCH | 407 | Fourth World Theory (3) |
| :--- | :--- | :--- |
| COMM | 322 | Comm and Popular Culture (3) |
|  | 385 | Rhet of Marginalized Voices (3) |
| CJC | 211 | Race, Gender, and Crime (3) |
| ENG | 491 | Lit of African American Trad (3) |
| HIST | 405 | Pre-Civil War America, 1800-48 (3) |
|  | 407 | US Civil War and Reconstruct (3) |
|  | 416 | Pre-Civil War South, 1776-1861 (3) |
|  | 441 | Comparative Slavery (3) |


| POLS | 475 | Minority Group Politics (3) |  |
| :--- | :--- | :--- | :---: |
| PSYS | 325 | Psych Prejudice Discrimination (3) |  |
| SOC | 221 | Intro Race and Ethnic Relat (3) |  |
|  | 333 | Sociology of Media (3) |  |
|  | 421 | Racial and Cultural Minor US (3) |  |
| TCOM | 363 | Film Genres (3) | 9 |
|  |  |  | 16 crs |

Students must take courses in at least three disciplines and must take appropriate courses to meet prerequisites for any
courses offered in the minor.

## 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.

## 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
bsu.edu/academics/collegesanddepartments/history/programs-of-study/ancientstudies

MINOR IN ANCIENT STUDIES (liberal arts), 20 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | ---: | :--- | :---: |
|  |  |  |  |
| ANTH | 103 | Archaeology and Culture | 3 |
| CC | 105 | Intro 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 (3-6) |  |
|  | 490 | Independent Study Anth (1-3) |  |

490 Independent Study Anth (1-3)

CC 201 Cultural Life Ancient Greece (3)
202 Cultural Life Ancient Rome (3)
301 Classical Lit in English Trans (3-6)
304 The Ancient City (3)
305 Classical Myth and Theory (3)
HIST 450 Reading and Special Study (1-3)
461 Development Greek Civilization (3)
462 Development Roman Civilization (3)
464 Byzantine Civilization (3)
PHIL 403 Reading and Special Study (1-6) 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, $\mathbf{1 5 - 1 7}$ credits

| PREFIX | NO | SHORT TITLE |
| :--- | :--- | :--- |
|  |  |  |
| 15-17 credits from |  |  |
| AHS | 290 | Asian Art (3) |
| ANTH | 370 | Topics in Old World Cultures (3-6) |
| ASIA | 400 | Study Abroad (3-9) |
| CH | 101 | Beginning Chinese 1 (4) |
|  | 102 | Beginning Chinese 2 (4) |
|  | or |  |
| JAPA | 101 | Beginning Japanese 1 (4) |
|  | 102 | Beginning Japanese 2 (4) |
| GEOG | 354 | Geography of Asia (3) |


| HIST | 370 | Foundations Asian Civilization (3) |
| :--- | :--- | :--- |
|  | 371 | Tradition and Chng Modern Asia (3) |
|  | 493 | History Pre-modern East Asia (3) |
|  | 495 | Modern China, 1600 to Present (3) |
|  | 496 | Modern Japan, 1600 to Present (3) |
| POLS | 394 | Internatnl Relations in Asia (3) |
|  | 488 | Gov and Politics of China (3) |
|  | 495 | Foreign Policy of China (3) |
| RELS | 290 | Hinduism (3) |
|  | 390 | Adv Study of Asian Religions (3) |

$15-17 \mathrm{crs}$
Credit in only one language (CH or JAPA) and only two courses in any single department counts toward the minor.

## ASIAN STUDIES (ASIA)

400 Study Abroad (3-9) 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.

## 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, 765-2855780, 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| GEOG | 357 | Geography of Europe | 3 |
| HIST | 456 | Europe Since 1945 | 3 |
|  |  |  |  |
| POLS | 382 | Govs and Politics of W Europe | 3 |

Approved electives
9 credits chosen from the following electives, no more than two elective courses ( 3 credits each) from any department ANTH 370 Topics in Old World Cultures (3-6)

ENG 205 World Literature (3)
497 Studies: Lit in Translation (3)

| EURO | 369 | Professional Experience (3) |  |
| :--- | :--- | :--- | :--- |
|  | 401 | Spec Issues in Euro Stds (3) |  |
|  | 405 | Independent Study (3) |  |
|  | 479 | Practical Experience (3) |  |
| FL | 307 | European Women Writers (3) |  |
|  | 308 | European Culture through Films (3) |  |
| GEOG | 356 | Geog Russia and Its Neighbors (3) |  |
| HIST | 454 | Era of World War I, 1870-1918 (3) |  |
|  | 455 | Era of World War II, 1918-1945 (3) |  |
|  | 487 | Soviet and Post-Soviet History (3) |  |
| PHIL | 306 | Contemporary Philosophy (3) |  |
| POLS | 313 | Mod West Pol Thought (3) |  |
|  | 385 | Politics of the European Union (3) |  |
|  | 386 | Pols Russia and Successor Sts (3) | 9 |
|  |  |  | 18 crs |

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, 497 and PHIL 306.

EUROPEAN STUDIES (EURO)

369 Professional Experience (3) Involves assigned duties in an organization, agency, corporation, or business dealing with European affairs, with appropriate monetary compensation.

Prerequisite: permission of the program director.
Not open to students who have credit in EURO 479.
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.

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.
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.

## 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

class from each language may be used.

## 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.

## INTERNATIONAL STUDY ABROAD (INSA)

400 International Study Abroad (0-50) Courses with the prefix INSA are reserved for participants in study abroad programs managed by affiliate providers. This placeholder course remains on the student's academic record until the
record is updated by Study Abroad following the completion of the student's study abroad program. It will be dropped and replaced with Ball State University courses, credits, and grades equivalent to the course work completed abroad. Prerequisite: permission of the Rinker Center. A total of 50 credits may be earned.

## INTERNATIONAL STUDY ABROAD (INTS)

300 Study Abroad Immersive Projects (1-15) 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.

## LEGAL STUDIES


#### Abstract

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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| Interdisciplinary major requirements |  |  |  |
| Common core, | 36 credits |  |  |
| BL | 367 | Principles of Estate Planning | 3 |
| POLS | 130 | American National Government | 3 |
|  | 141 | Introduction to Paralegalism | 3 |
|  | 229 | Law Office Mgmt and Technology | 3 |
|  | 241 | Family Law | 3 |
|  | 242 | Legal Research and Writing | 3 |
|  | 243 | Litigation | 3 |
|  | 342 | Problems in Public Policy (3) |  |
|  | or |  |  |
|  | 431 | Congress (3) | 3 |
|  | 344 | Adv Legal Research and Writing | 3 |


| 369 | Pd Prof Exp Amer Gov and Law (3) |  |
| :--- | :--- | :---: |
| or |  |  |
| 479 | Pract Exp Amer Gov and Law (3) |  |
| or |  | 3 |
| 480 | Access to Justice Clinic (3) | 3 |
| 445 | Adv Litigat and Alt Disp Res |  |
| 250 | Access to Justice in Legal Sys (3) |  |
| or |  | 3 |
| 455 | Administrative Law (3) | 36 crs |

Complete one concentration
Concentration 1: Public Law, 33 credits
ACC 201 Principles of Accounting $1 \quad 3$
BL 260 Principles of Business Law 3
POLS 433 The Judiciary 3
RMI 270 Principles of Risk Mgt and Ins 3
15 credits from
COMM 340 Leadership Communication (3)
385 Rhet of Marginalized Voices (3)
POLS 237 State and Local Politics (3)

|  | 238 | Urb Gov in United States (3) |  |
| :---: | :---: | :---: | :---: |
|  | 347 | Environmental Law and Policy (3) |  |
|  | 408 | Topics in Legal Studies (3) |  |
|  | 435 | Intergovernmental Relations (3) |  |
|  | 443 | American Constitutional Law (3) |  |
|  | 444 | Constitutional Liberties (3) |  |
|  | 474 | Women and Politics (3) |  |
|  | 475 | Minority Group Politics (3) |  |
|  | 490 | International Law (3) |  |
| PSYS | 471 | Psych in the Legal System (3) |  |
| RMI | 330 | Employee Benefits and Ret Plan (3) |  |
| SOC | 221 | Intro Race and Ethnic Relat (3) |  |
|  | 235 | Sociology of Gender (3) |  |
|  | 320 | Social Inequality (3) |  |
|  | 421 | Racial and Cultural Minor US (3) |  |
|  | 425 | Sociology of Law (3) |  |
| SOCW | 100 | Introduction to Social Work (3) | 15 |
| 6 credits | from |  |  |
| ACC | 202 | Principles of Accounting 2 (3) |  |
| CJC | 101 | Intro to Criminal Justice (3) |  |
| COMM | 220 | Argumentation and Debate (3) |  |
|  | 320 | Persuasion (3) |  |
|  | 325 | Interviewing (3) |  |
| MGT | 300 | Managing Behavior in Org (3) |  |
| MKG | 300 | Principles of Marketing (3) |  |
| PHIL | 200 | Symbolic Logic (3) |  |
| PSYS | 100 | Intro to Psychological Science (3) |  |
| RMI | 473 | Insurance Law (3) |  |
| SOC | 100 | Principles of Sociology (3) | 6 |
| 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. |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |


| ISOM | 125 | Micro Apps for Business | 3 |
| :--- | :--- | :--- | :--- |
|  | 210 | Business Information Systems | 3 |

12 credits from
BL 363 Uniform Commercial Code (3)

BUSA 302 Career Management (3)
ECON 346 Law and Economics (3)
FIN 300 Principles of Finance (3)
ISOM 228 Adv Micro Apps for Business (3)
313 DB and Info Resource Mgt (3)
415 Information Systems Management (3)
MGT 300 Managing Behavior in Org (3)
361 FDN of HR Employee Relations (3)
MKG 300 Principles of Marketing (3)
PHIL 200 Symbolic Logic (3)
POLS 281 Econ Pol Prob of Emerg Ntns (3)
347 Environmental Law and Policy (3)
408 Topics in Legal Studies (3)
433 The Judiciary (3)
435 Intergovernmental Relations (3)
443 American Constitutional Law (3)
444 Constitutional Liberties (3)
474 Women and Politics (3)
490 International Law (3)
RE 230 Real Estate Principles (3)
331 RE Construction Law and Fin (3)
RMI 270 Principles of Risk Mgt and Ins (3)
330 Employee Benefits and Ret Plan (3)
473 Insurance Law (3)
425 Sociology of Law (3)

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 bsu.edu/economics.

MAJOR IN MATHEMATICAL ECONOMICS (BA/BS), 52-55 credits

217 Linear Algebra
259 Intro to Mathematical Software
9 credits from
ECON from 300-and 400-level must include

ECON | 421 | Mathematical Economics (3) |
| :--- | :--- | :--- |
| or |  |
| 424 | Econometrics (3) |

6-7 credits from
MATH 267, 320, 335, 351, 362, 363, 374, 422, $428,429,454,456,457,465,470$, and 471

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 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

There is a college moratorium on admission to this degree.

## 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 bsu.edu/peacecenter.

## MINOR IN PEACE STUDIES AND CONFLICT RESOLUTION, 18 credits

| PREFIX | NO | SHORT TITLE | CREDIT |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| ID | 301 | Intro Peace Std and Conf Res | 3 |
| COMM | 442 | Communication and Conflict (3) |  |
|  | or |  |  |
| POLS | 457 | Alternative Dispute Resolution (3) |  |
|  | or |  |  |
| GEOG | 270 | Geog of International Conflict (3) | 3 |
|  |  |  |  |
| Group 1, Peace studies, 3 credits from |  |  |  |
| CJC | 312 | Victimology (3) |  |
| GEOG | 470 | Political Geography (3) |  |
| HIST | 215 | Women in American History (3) |  |
|  | 452 | Women Modern European History (3) |  |
| RELS | 160 | Intro to Religion in Culture (3) |  |
|  | 280 | Topics in Religion in America (3) |  |
| SOC | 380 | Religion and Ethics (3) | 3 |
|  | 242 | Social Problems (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) |
| :--- | :--- | :--- |
|  | 392 | U N and International Org (3) |
| SOCW | 310 | Social Work Practice 2 (3) |
|  | 410 | Social Work Practice 3 (3) |

Group 3, Multiculturalism, 3 credits from
ANTH 311 Ethnicity and Race (3)
COMM 290 Intercultural Communication (3)
CPSY 470 Cross-Cult Counseling (3)
EDMU 205 Intro to Multicul Ed (3)
206 Adv Ethnic Multicul Grp Beh (3)
ENG 491 Lit of African American Trad (3)
HIST 210 Introduction to Black History (3)
371 Tradition and Chng Modern Asia (3)
373 History of the Middle East (3)
POLS 281 Econ Pol Prob of Emerg Ntns (3)
475 Minority Group Politics (3)
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.

## 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. Some courses present online Internet distance learning opportunities.

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

## MINOR IN REAL ESTATE DEVELOPMENT, 25 credits

PREFIX NO SHORT TITLE

| PLAN | 240 | Plan and Priv Dev |
| :--- | :--- | :--- |
|  | 303 | Economic Development Studio |
| RE | 230 | Real Estate Principles |

Capstone: 3 credits from
FCPM 400 Housing and Society (3)
PLAN 490 Ind Study in Plan (1-9)

498 Spec Proj in Urbn Plan and Dev (3-9)
490 Study in Technology (1-3)
TEDU
TCST
CREDITS

Electives
12 credits from any of the following areas

Business Administration and Real Estate Law
ACC 201 Principles of Accounting 1 (3)
202 Principles of Accounting 2 (3)


# COLLEGE OF ARCHITECTURE <br> AND PLANNING 

## P. Repp, Dean; D. Ferguson, Associate Dean

bsu.edu/cap/
The College of Architecture and Planning (CAP) offers degree programs in architecture, construction management, environmental design (architecture), interior design, landscape architecture, urban planning and development, historic preservation, and urban design. All programs are fully accredited by their respective professional accrediting agencies. Professional graduate degrees in architecture, 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.

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. That is, admission into the second year at CAP is subject to departmental enrollment review, and established departmental retention standards.

## 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.

## COLLEGE OF ARCHITECTURE AND 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.

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.
161 Design Communications Media 1 (2) Methods for environmental design communications in a variety of media.

162 Design Communications Media 2 (2) Methods for environmental design communications in a variety of media.

Prerequisite: CAP 161.

## 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.

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 problemsolving and/or decision-making strategies.

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.

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 the dean of the College of Architecture and Planning.

400 Community-Based Projects (1-3) 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.

## 498 Special Projects in College of Architecture and

Planning (3) Special projects in the College of Architecture and Planning undertaken by groups of students.

Prerequisite: junior standing; permission of the project director.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

## ARCHITECTURE

## A. Swartz, Chairperson <br> bsu.edu/architecture/

Architects connect art with science, designing buildings and spaces for people to live, work and play. Architecture physically embodies our cultural values while aspiring to balance delight with function and effective technologies. Architecture is an education and profession that attends to the critical environmental challenges of the $21^{\text {st }}$ century while preparing students in analytical thinking, intellectual curiosity, asking good questions, ideation, representation, communication, making, and assessing results in regards to the built environment. The Department of Architecture offers three undergraduate degree programs in architecture. Each of these is tailored to different student needs 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 educational pursuits. This degree program is newly approved in the
university and is pursuing candidacy and initial 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. See ** below.

The four-year undergraduate major BS in Environmental Design provides students with an immersive exposure to the discipline of architecture, effectively preparing them for leadership roles in allied 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/Bachelors/FirstYearProgram.aspx

## Admission Standards:

1. Portfolio of CAP first year work including design, design communication media work and writing examples
2. A minimum GPA of 2.75 overall in the CAP first-year courses
3. 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 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, is in candidacy for accreditation of the following NAAB-accredited degree program:
B.Arch. (154 undergraduate credits)

Initial application for candidacy: 2017
Visit for Initial accreditation: Fall 2020

Projected year of initial accreditation: Spring 2021 for class of 2020
** Ball State University's Department of Architecture offers the following NAAB-accredited degree programs:
M.Arch (pre-professional degree +46 graduate credits)
M.Arch (non-pre-professional degree +104 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.
bsu.edu/Academics/CollegesandDepartments/CAP/Programs/Architecture/Programs/Masters.aspx

## 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| ARCH | 100 | Introduction to Architecture | 2 |
|  | 201 | Architectural Design | 4 |
|  | 202 | Architectural Design | 4 |
|  | 214 | Arch Build Tech 1 | 3 |
| 218 | Structural Systems 1 | 3 |  |
| 229 | History of Architecture 1 | 3 |  |
| 251 | Social and Env Justice in Dsgn | 3 |  |
| 263 | Digital Design | 3 |  |
| 273 | Environmental Systems 1 | 3 |  |
| 301 | Architectural Design | 5 |  |
| 302 | Architectural Design | 5 |  |
| 314 | Arch Build Tech 2 | 3 |  |
| 318 | Structural Systems 2 | 3 |  |
| 329 | History of Architecture 2 | 3 |  |
| 340 | Intro to HP for Architects | 3 |  |
| 373 | Environmental Systems 2 | 3 |  |
| 400 | Comprehensive Arch Studio | 6 |  |
| 403 | Architecture Design Studio | 6 |  |
| 404 | Arch Final Project Studio | 6 |  |
| 410 | Critical Practice | 3 |  |
| 418 | Structural Systems 3 | 3 |  |
| 420 | Professional Practice | 3 |  |
| 424 | Res and Prog Methods in Arch | 3 |  |
| 455 | Architectural Internship | 0 |  |


| CAP | 101 | Environment Design and Plan 1 | 3 |
| :--- | :--- | :--- | :---: |
|  | 102 | Environment Design and Plan 2 | 3 |
|  | 161 | Design Communications Media 1 | 2 |
|  | 162 | Design Communications Media 2 | 2 |
| LA | 100 | Intro Landscape Architecture | 2 |
| PLAN | 100 | Intro Urb Planning and Dev | 2 |
|  |  |  |  |
| 12 credits from electives in ARCH, PLAN, LA, and <br> CAP (excludes required courses in the professional <br> curriculum, University Core Curriculum courses, and <br> general electives) | 12 |  |  |
|  |  | 109 crs |  |

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), 85 credits

PREFIX NO SHORT TITLE
CREDITS

Introduction to Architecture 2
201 Architectural Design 4
202 Architectural Design 4
214 Arch Build Tech $1 \quad 3$
218 Structural Systems $1 \quad 3$
229 History of Architecture 13
251 Social and Env Justice in Dsgn 3
261 Design Communications Media 1
263 Digital Design 3
273 Environmental Systems $1 \quad 3$
301 Architectural Design 5
302 Architectural Design 5
314 Arch Build Tech 2 3
318 Structural Systems $2 \quad 3$
329 History of Architecture 2
373 Environmental Systems 23
401 Architectural Design 5
402 Architectural Design 6
418 Structural Systems 3
429 Appl Cultl to Desgn Plng 3
CAP 101 Environment Design and Plan $1 \quad 3$
102 Environment Design and Plan 2 3
161 Design Communications Media $1 \quad 2$
162 Design Communications Media 22

| LA | 100 | Intro Landscape Architecture | 2 |
| :--- | :--- | :--- | :--- |
| PLAN | 100 | Intro Urb Planning and Dev | 2 |
|  |  |  |  |
| Elective <br> 3 |  |  |  |
| credits from electives in ARCH, CAP, LA, PLAN or <br> othepartments with permission of the architecture <br> undergraduate advisor | 3 |  |  |
|  |  | 85 crs |  |

Elective credits may be waived by completing an approved minor. Not open to environmental design majors.

## MAJOR IN ENVIRONMENTAL DESIGN, ARCHITECTURE (BA/BS), 66 credits

PREFIX NO SHORT TITLE CREDITS

| ARCH | 100 | Introduction to Architecture | 2 |
| :---: | :---: | :---: | :---: |
|  | 201 | Architectural Design | 4 |
|  | 202 | Architectural Design | 4 |
|  | 214 | Arch Build Tech 1 | 3 |
|  | 218 | Structural Systems 1 | 3 |
|  | 229 | History of Architecture 1 | 3 |
|  | 261 | Design Communications Media | 1 |
|  | 273 | Environmental Systems 1 | 3 |
|  | 301 | Architectural Design | 5 |
|  | 314 | Arch Build Tech 2 | 3 |
|  | 318 | Structural Systems 2 | 3 |
|  | 329 | History of Architecture 2 | 3 |
| CAP | 101 | Environment Design and Plan 1 | 3 |
|  | 102 | Environment Design and Plan 2 | 3 |
|  | 161 | Design Communications Media 1 | 2 |
|  | 162 | Design Communications Media 2 | 2 |
| LA | 100 | Intro Landscape Architecture | 2 |
| PLAN | 100 | Intro Urb Planning and Dev | 2 |
| 15 cred NREM, archite | from <br> oth <br> re de | electives in ARCH, CAP, LA, PLA departments with permission of th artment chairperson | 15 |

Not open to architecture majors.

## MINOR IN HISTORIC PRESERVATION, 15 credits

## Admission Requirements

Sophomores, juniors, and seniors eligible with a 3.0 GPA or better; admission by historic preservation director based on 1page statement of intent or interview.

Degree Requirements
PREFIX NO SHORT TITLE
CREDITS
ARCH 440 Intro to Pres

| Design History, 3 credits from |  |  |
| :---: | :---: | :---: |
| ARCH | 229 | History of Architecture 1 (3) |
|  | 329 | History of Architecture 2 (3) |
|  | 428 | Hist of Arch Built Environment (3) |
| LA | 220 | LA History 1 (3) |
|  | 221 | LA History 2 (3) |
| PLAN | 220 | Hist and Thry of Plan 1 (3) |
|  | 221 | Hist and Thry of Plan 2 (3) |
|  | 477 | History of Urban Form (3) |
| Methods, 6 credits from |  |  |
| ARCH | 442 | Pres Res Meth (3) |
|  | 447 | Pres Tech (3) |
| HIST | 240 | Introduction to Public History (3) |
| LA | 420 | Historic Land Preservation (3) |
| PLAN | 450 | Neighborhood Planning (3) |
| Law/Ethics/Issues, 3 credits from |  |  |
| ARCH | 441 | Pres Policy (3) |
|  | 473 | Pres Current Issues (3) |
| PLAN | 425 | Urban Ag as Comm Dev (3) |

## MINOR IN SOCIAL AND ENVIRONMENTAL JUSTICE, 15 credits

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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| Open only to majors in Architecture. |  |  |  |
| 6 credits from | (including at least one ARCH course) |  |  |
| ARCH | 407 | Fourth World Theory (3) |  |
|  | 408 | Architects of Hope (3) |  |
|  | 490 | Independent Project (3) |  |
|  | 498 | Spec Proj in Arch (3) |  |
| LA | 490 | Independent Projects (3) |  |
|  | 498 | Special Projects (3) |  |
| PLAN | 490 | Ind Study in Plan (3) |  |
|  | 498 | Spec Proj in Urbn Plan and Dev (3) |  |
| CAP | 498 | Spec Projects in CAP (3) |  |
|  |  |  |  |
| 9 credits from |  |  |  |
| ANTH | 101 | Intro to Cultural Anthropology (3) |  |
|  | 111 | Anth, Cult, and Globalization (3) |  |
|  | 311 | Ethnicity and Race (3) |  |
| BIO | 220 | Ecological Issues 21st Century (3) |  |
| CAP | 200 | Design Thinking (3) |  |
| CJC | 101 | Intro to Criminal Justice (3) |  |
|  | 102 | Introduction to Criminology (3) |  |
| COMM | 290 | Intercultural Communication (3) |  |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | 201 | Elementary Microeconomics (3) |  |


|  | 279 | Problems of Emerging Nations (3) |  |
| :---: | :---: | :---: | :---: |
| GEOG | 121 | Geog of Cultural Environment (3) |  |
|  | 150 | Global Geography (3) |  |
| HIST | 198 | Non-Western Civilizations (3) |  |
|  | 370 | Foundations Asian Civilization (3) |  |
| NREM | 101 | Environment and Society (3) |  |
|  | 205 | Internatnl Natural Resources (3) |  |
| PHIL | 100 | Introduction to Philosophy (3) |  |
|  | 102 | Intro to Critical Reasoning (3) |  |
|  | 202 | Ethics (3) |  |
|  | 203 | Social Philosophy (3) |  |
|  | 230 | Environmental Ethics (3) |  |
| POLS | 293 | International Relations (3) |  |
| PSYS | 324 | Psychology of Women (3) |  |
|  | 325 | Psych Prejudice Discrimination (3) |  |
|  | 424 | Psychology of Diversity (3) |  |
| SOC | 100 | Principles of Sociology (3) |  |
|  | 328 | Global and the Social World (3) |  |
|  | 421 | Racial and Cultural Minor US (3) |  |
| WGS | 210 | Intro Womens and Gender Stud (3) | 9 |
|  |  |  | 15 crs |
| Open only to students not majoring in Architecture. |  |  |  |
| ARCH | 251 | Social and Env Justice in Dsgn | 3 |
| 3 credits from |  |  |  |
| ARCH | 407 | Fourth World Theory (3) |  |
|  | 408 | Architects of Hope (3) |  |
|  | 429 | Appl Cultl to Desgn Plng (3) |  |
|  | 490 | Independent Project (3) |  |
|  | 498 | Spec Proj in Arch (3) |  |
| LA | 490 | Independent Projects (3) |  |
|  | 498 | Special Projects (3) |  |
| PLAN | 490 | Ind Study in Plan (3) |  |
|  | 498 | Spec Proj in Urban Plan and Dev (3) |  |
| CAP | 498 | Spec Projects in CAP (3) | 3 |
| 9 credits from |  |  |  |
| ANTH | 101 | Intro to Cultural Anthropology (3) |  |
|  | 111 | Anth, Cult, and Globalization (3) |  |
|  | 311 | Ethnicity and Race (3) |  |
| BIO | 220 | Ecological Issues 21 ${ }^{\text {st }}$ Century (3) |  |
| CAP | 200 | Design Thinking (3) |  |
| CJC | 101 | Intro to Criminal Justice (3) |  |
|  | 102 | Introduction to Criminology (3) |  |
| COMM | 290 | Intercultural Communication (3) |  |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | 201 | Elementary Microeconomics (3) |  |
|  | 279 | Problems of Emerging Nations (3) |  |
| GEOG | 121 | Geog of Cultural Environment (3) |  |
|  | 150 | Global Geography (3) |  |
| HIST | 198 | Non-Western Civilizations (3) |  |
|  | 370 | Foundations Asian Civilization (3) |  |


| NREM | 101 | Environment and Society (3) |  |
| :--- | :--- | :--- | :--- |
|  | 205 | Internatnl Natural Resources (3) |  |
| PHIL | 100 | Introduction to Philosophy (3) |  |
|  | 102 | Intro to Critical Reasoning (3) |  |
|  | 202 | Ethics (3) |  |
|  | 203 | Social Philosophy (3) |  |
|  | 230 | Environmental Ethics (3) |  |
| POLS | 293 | International Relations (3) |  |
| PSYS | 324 | Psychology of Women (3) |  |
|  | 325 | Psych Prejudice Discrimination (3) |  |
|  | 424 | Psychology of Diversity (3) |  |
| SOC | 100 | Principles of Sociology (3) |  |
|  | 328 | Global and the Social World (3) |  |
|  | 421 | Racial and Cultural Minor US (3) |  |
| WGS | 210 | Intro Womens and Gender Stud (3) | 9 |
|  |  |  | 15 |

## ARCHITECTURE (ARCH)

100 Introduction to Architecture (2) An introduction to architecture through an exploration of products of the built environment.

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.

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.

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 architecture majors.
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 architecture majors.
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.

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.

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.

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.

Prerequisite: ARCH 100.

## 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.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.
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.

273 Environmental Systems 1 (3) Introduction to environmental systems in architecture with emphasis on passive interventions.

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.
Parallel: ARCH 410.
Open only to B.ARCH; BS/BA in architecture and environmental design majors.

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.
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.

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.
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.
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.

## 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 conversation, sustainability and cultural continuity.

Not open to students who have credit in ARCH 440.
Open only to B.ARCH; BS/BA in architecture and environmental design majors.

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.
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.
401 Architectural Design (5) Capstone project: a designbased study in depth requiring students to reflect on and synthesize previous course work.

Prerequisite: ARCH 302.
Open only to architecture majors.
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 302.
Open only to architecture majors.
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 majors or by permission of the department chairperson.

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.

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.
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.
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.

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.

410 Critical 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) providing experience with the diverse breadth of architectural practices to inform student's professional path.

Parallel: ARCH 301.
Open only to B. ARCH; BS/BA in architecture and environmental design majors.

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.
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.

## 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.

## 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.

## 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.

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.

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.

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.

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.

## 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.

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 protection 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.
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.
442 Preservation Research Methods (3) A comprehensive examination of the methods of researching, surveying, recording, and registering historic properties and heritage sites. Legal concepts of "significance" and "context" are applied to evaluating the historic built environment. The course emphasizes applied research and analysis skills and the preparation of a research study report.

Prerequisite: permission of the program director.
447 Preservation Technology (3) An in-depth examination of architectural conservation. This course includes an analysis of the materials and systems of construction used in historic buildings. Students employ contemporary technology to document, analyze and diagnose building conditions, then
formulate interventions for the stewardship of historic structures.

Prerequisite: permission of the program director.
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 National Intern-Architect Development Program (IDP).

Prerequisite: permission of the internship program director or the department chairperson.

## 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.

490 Independent Project (1-6) 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.

495 Architecture History/Theory Elective (3-6) 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.
498 Special Project in Architecture (3-6) 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.

## CONSTRUCTION MANAGEMENT AND INTERIOR DESIGN

J. Jones, Chairperson<br>bsu.edu/academics/collegesanddepartments/construction-management-interior-design

## MAJOR IN CONSTRUCTION MANAGEMENT (BA/BS), 96 credits

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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| ECON | 201 | Elementary Microeconomics | 3 |
| MATH | 132 | Brief Calculus | 3 |
|  | 181 | Elementary Probability Stats (3) |  |
| OCON | 221 | Business Statistics (3) | 3 |
| PHYC | 110 | General Physics 1 | 4 |
|  | 112 | General Physics 2 (4) |  |
|  | or |  |  |
| CHEM | 111 | General Chemistry 1 (4) | 4 |


| NREM | 211 | Water Resources (3) |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| NREM | 221 | Soil Resources (3) | 3 |  |  |  |
| TCST | 104 | Introduction to Construction | 3 |  |  |  |
|  | 106 | CAD for Const Management | 3 |  |  |  |
|  | 180 | Construction Documents | 3 |  |  |  |
|  | 200 | Site Preparation | 3 |  |  |  |
|  | 222 | Technical Presentation | 3 |  |  |  |
|  | 250 | Construction Methods Matls 1 | 3 |  |  |  |
|  | 261 | Mechanical Construction | 3 |  |  |  |
|  | 262 | Electrical Construction | 3 |  |  |  |
|  | 300 | Structural Mechanics | 3 |  |  |  |
|  | 310 | Ethics in Construction | 3 |  |  |  |
|  | 320 | Estimating | 3 |  |  |  |
|  | 355 | Planning and Scheduling | 3 |  |  |  |
|  | 365 | Construction Safety | 3 |  |  |  |
|  | 400 | Const Proj Mngmnt | 3 |  |  |  |
|  | 420 | Construction Finance and Law | 3 |  |  |  |
|  | 460 | Capstone in Construction | 3 |  |  |  |
| TDPT | 380 | Internship in Technology (3) | 6 |  |  |  |
| TCST technical electives approved by advisor |  |  |  |  |  | 7 |
|  |  |  |  |  |  |  |
| 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 TCST 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, 15 credits

| ACC | 201 | Principles of Accounting 1 | 3 |
| :--- | :--- | :--- | :--- |
| BL | 260 | Principles of Business Law | 3 |
| ISOM | 251 | Introductory Operations Mgt | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |

Business elective

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

## MAJOR IN INTERIOR DESIGN (BA/BS), 87 credits

## PREFIX NO

| AHS | 100 | Introduction to Art | 3 |
| :--- | :--- | :--- | :--- |
| FCID | 101 | Rapid Visualization | 3 |
|  | 110 | Design Fundamentals | 3 |
|  | 111 | Graphic Communication 1 | 3 |
|  | 112 | Design Presentation | 3 |
|  | 115 | Interior Materials and Appl | 3 |
|  | 120 | Graphic Communication 2 | 3 |
|  | 210 | Hist and Theoretical Studies 1 | 3 |
| 221 | Graphic Communication 3 | 3 |  |
|  | 222 | Interior Design Studio 1 | 3 |
|  | 224 | Interior Design Studio 2 | 3 |
| 225 | Hist and Theoretical Studies 2 | 3 |  |
|  | 228 | Graphic Communication 4 | 3 |
|  | 261 | Universal Design | 3 |
|  | 300 | ID Professional Practice | 3 |
|  | 314 | Color and Light in ID | 3 |
|  | 320 | Furniture Design | 3 |

Interior Design Studio 3 ..... 3
Interior Design Studio 4 ..... 3
Int Const Build Systems ..... 3
Internship in Interior Design (1-6) ..... 5
NCIDQ Preparation ..... 1
ID Programming ..... 3
Interior Design Studio 5 ..... 3
Interior Design Studio 6 ..... 3
FCS Body of Knowledge ..... 3
FCS in Practice ..... 3
6 credits from
ACC 201 Principles of Accounting 1 (3)
Introduction to Metals (3)
Introduction to Glass (3)
$\begin{array}{lll}\text { AFA } & 101 & \text { Drawing 1 (3) } \\ \text { ARCH } & 100 & \text { Introduction to Architecture (2) }\end{array}$
329 History of Architecture 2 (3)
ECON 116 Survey of Economic Ideas (3)
FCID 220 Sustainable Interiors (3)
MKG 300 Principles of Marketing (3)
TCST 104 Introduction to Construction (3) 180 Construction Documents (3)
250 Construction Methods Matls 1 (3)
TDPT 299X Experimental Development Topic (3 or 6) 6
87 crs

Students are placed in the pre-interior design program for the first two years. All pre-interior design students are required to participate in Portfolio Review during the second semester of the second year to be admitted to the 300 -level courses and higher. Students will be admitted to the interior design program, upon successful completion of the review. See interior design Web site for more details. A grade of $C$ or better is required in all required courses with the exception of AHS 100 and FCS core courses. Students with grade of $C$ - or lower need to retake the course. Students may not progress through the program until they satisfy the requirements.

## MINOR IN BUSINESS ADMINISTRATION FOR CONSTRUCTION MANAGEMENT, 15 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ISOM | 251 | Introductory Operations Mgt | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
| Business elective | 3 |  |  |
|  |  | 15 crs |  |

Students may choose the business elective from ACC 202; ECON 202; RE 230; RMI 270; MGT 241, 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

## PREFIX NO SHORT TITLE <br> CREDITS

Construction core, 15 credits

| TCST | 104 | Introduction to Construction |
| :--- | :--- | :--- |
| 180 | Construction Documents |  |
| 320 | Estimating |  |
| 355 | Planning and Scheduling |  |
| 400 | Const Proj Mngmnt |  |
|  |  |  |
|  |  |  |
| 3 credits from |  |  |
| TCST | 106 | CAD for Const Management (3) |
| 200 | Site Preparation (3) |  |
| 250 | Construction Methods Matls 1 (3) |  |
| 252 | Building Diagnostics (3) |  |
| 300 | Structural Mechanics (3) |  |
| 302 | Highway Construction 1 (3) |  |
| 310 | Ethics in Construction (3) |  |
| 350 | Mechanical Electrical Systems (3) |  |
| 365 | Construction Safety (3) |  |
| 420 | Construction Finance and Law (3) |  |
| Approved technical elective |  |  |

## MINOR IN INTERIOR DESIGN, 24 credits

## PREFIX NO SHORT TITLE

CREDITS

For architecture majors:

| ARCH | 201 | Architectural Design | 4 |
| :--- | :--- | :--- | :--- |
| CAP | 102 | Environment Design and Plan 2 | 3 |
|  | 162 | Design Communications Media 2 | 2 |
| FCID | 111 | Graphic Communication 1 | 3 |
|  | 115 | Interior Materials and Appl | 3 |

For all other majors:
FCID 101 Rapid Visualization 3
110 Design Fundamentals 3
111 Graphic Communication $1 \quad 3$
115 Interior Materials and Appl 3
222 Interior Design Studio 1 3
15 crs

For all interior design minors, 9 additional credits from the following:

| FCID | 112 | Design Presentation (3) |
| :--- | :--- | :--- |
| 120 | Graphic Communication 2 (3) |  |
| 210 | Hist and Theoretical Studies 1 (3) |  |
| 221 | Graphic Communication 3 (3) |  |
| 224 | Interior Design Studio 2 (3) |  |
| 225 | Hist and Theoretical Studies 2 (3) |  |
| 228 | Graphic Communication 4 (3) |  |
| 261 | Universal Design (3) |  |
| 314 | Color and Light in ID (3) |  |
| 320 | Furniture Design (3) |  |
| 324 | Interior Design Studio 3 (3) |  |
| 362 | Int Const Build Systems (3) |  |
| 420 | ID Programming (3) |  |

24 crs
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.

## FAMILY AND CONSUMER SCIENCES: INTERIOR DESIGN (FCID)

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.
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.
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: FCID 101.
Open only to interior design majors and minors.
112 Design Presentation Techniques (3) An introduction to the use of two-dimensional, three-dimensional, and fourdimensional (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: FCID 101.
Open only to interior design majors and minors.

115 Interior Materials and Applications (3) Study of interior materials, finishes, furniture, and architectural components. Covers floor, wall, and ceiling finishes, furniture, cabinetry, and casegoods. Selection criteria, green design, cost, quality, application, sources, and specifications will be discussed and analyzed.

120 Graphic Communication 2 (3) Visual communication techniques for interior designers. Emphasis on computer applications and basic training for Computer Aided Drafting (CAD).

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: FCID 110.
Open only to interior design majors and minors.
220 Sustainable Interiors (3) Focuses on the examination and application of the appropriate sustainable/green principles in interior design. Emphasis will be on Leadership in Energy and Environmental Design for Contract Interiors Green Building Rating System ${ }^{\text {TM }}$ (LEED-CI), a national certification program by the U.S. Green Building Council. Prerequisite: FCID 115.
Open only to interior design majors and minors.
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: FCID 120 or permission of the department chairperson.

Open only to interior design majors and minors.
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: FCID 110, 111, 115.
Open only to interior design majors and minors.
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: FCID 120, 222.
Open only to interior design majors and minors.
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: FCID 210.
Open only to interior design majors and minors.
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: FCID 120 or permission of the department chairperson.

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: FCID 120.
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.
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: FCID 224.
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: FCID 221, 224, or ARCH 201.
Open only to interior design majors and minors.
324 Interior Design Studio 3 (3) Development and application of planning processes for medium scale commercial and residential projects with focus on accessibility and universal design.

Prerequisite: FCID 221, 224.
Open only to interior design majors and minors.

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: FCID 324.
Open only to interior design majors and minors.

## 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: FCID 221 and 224.
369 Internship in Interior Design (1-6) 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: FCID 324 and permission of the internship coordinator.

A total of 6 credits of credit may be earned.
Open only to interior design majors.
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: FCID 424 or permission of the department chairperson.

Open only to interior design majors.
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: FCID 324.
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: FCID 334.
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: FCID 420, 424.
Open only to interior design majors and minors.

## TECHNOLOGY: CONSTRUCTION MANAGEMENT (TCST)

104 Introduction to Construction (3) Overview of the aspects of construction management including designerbuilder relationships, construction documents, estimating, scheduling, project management, safety, materials, and other relevant subjects.

106 CAD for Construction Management (3) Focuses on the application of computer-aided design processes in construction management.

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: TCST 104.
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.

## 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, timephased simulations, and clash detection/correction.Prerequisite: TCST 104 and 180.
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.

## 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.

## 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.

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.

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: TCST 104 and 106 and 180.
262 Electrical Construction Management (3) The study of managing the construction of electrical systems, including codes, design, methods, and materials.

Prerequisite: TCST 104 and 106 and 180.

## 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: TCST 104 and 180.
299X Special Topics in Construction Management (1-9)
Special topics relevant to the construction management profession. Course titles will be announced before each semester.

A total of 9 credits may be earned.
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; PHYC 110.
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: TCST 250.
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: TCST 302, 355.
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: TCST 104.
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.

Open only to juniors and seniors.
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: TCST 104, 180, or permission of the department chairperson.

350 Mechanical and Electrical Systems (3) The study of codes, design, methods, and materials related to electrical, plumbing, heating, ventilation, and air conditioning systems.

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: TCST 104, 180, or permission of the department chairperson.

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.

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: TCST 104, 180, 320, 355, or permission of the department chairperson.

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.

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: TCST 222, 320, and 355.
Prerequisite or parallel: TCST 400 and 420.
Open only to majors in construction management with senior status.

## 490 Independent Study in Construction Management

(1-9) 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 earne

## LANDSCAPE ARCHITECTURE

## J. Blalock, 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 nationally ranked in the top ten programs in the USA for over a decade.

## MAJOR IN LANDSCAPE ARCHITECTURE (BLA), 115 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| ARCH | 100 | Introduction to Architecture | 2 |
| CAP | 101 | Environment Design and Plan 1 | 3 |
|  | 102 | Environment Design and Plan 2 | 3 |
|  | 161 | Design Communications Media 1 | 2 |
|  | 162 | Design Communications Media 2 | 2 |
| LA | 100 | Intro Landscape Architecture | 2 |
|  | 201 | Site Design | 4 |
|  | 202 | Park and Open Space Design | 4 |
|  | 211 | LA Engineering 1 | 4 |
|  | 214 | Field Study | 1 |
|  | 220 | LA History 1 | 3 |
|  | 221 | LA History 2 | 3 |
|  | 270 | Environmental Systems | 3 |
|  | 280 | Computer Applications in LA | 3 |
| 301 | Housing and Community Design | 4 |  |
|  | 302 | Planting Design | 4 |
| 312 | LA Engineering 2 | 4 |  |
|  | 313 | LA Engineering 3 | 4 |
| 341 | Plants 1 | 4 |  |
|  | 369 | LA Internship (0-1) | 1 |
| 401 | Regional Landscape Design | 5 |  |
| 403 | Urban Design | 5 |  |
| 404 | LA Comprehensive Project | 5 |  |
| 414 | LA Engineering 4 | 3 |  |
| 451 | LA Research | 3 |  |
| 460 | Professional Practice | 3 |  |


| PLAN | 100 | Intro Urb Planning and Dev | 2 |
| :---: | :---: | :---: | :---: |
| 8 credits from department electives |  |  | 8 |
| 3 credits from |  |  |  |
| BIO | 216 | Ecology (3) |  |
| GEOL | 207 | Environ Geology Geochem |  |
| NREM | 211 | Water Resources (3) |  |
|  | 221 | Soil Resources (3) | 3 |
| Directed electives or minor |  |  | 18 | for BIO 216.

## MINOR IN LANDSCAPE ARCHITECTURE, 19 credits

## PREFIX NO SHORT TITLE

CREDITS

| LA | 100 | Intro Landscape Architecture | 2 |
| :--- | :--- | :--- | :--- |
|  | 211 | LA Engineering 1 | 4 |
| 220 | LA History 1 | 3 |  |
| 270 | Environmental Systems | 3 |  |
| 341 | Plants 1 | 4 |  |
|  |  |  |  |
| 3 credits from other department courses | 3 |  |  |

19 crs

## LANDSCAPE ARCHITECTURE (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.

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.
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.
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.
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. Offered credit/no credit only.

Parallel: LA 201.
215 Field Studies 2 (1-3) 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.
220 Landscape Architecture History 1 (3) The history of landscape architecture from ancient times to 1800. Examples of landscape expressions of the human-environment relationship resulting in the conscious shaping of urban and rural landscapes, and the creation of such landscapes as parks, gardens, and urban plazas.

221 Landscape Architecture History 2 (3) The history of landscape architecture from 1800 to the present. Emphasizes the North American human-environment relationship, its relationship to European antecedents, and other cultural parallels in landscape design.

270 Environmental Systems (3) Qualitative investigations and analysis of landscape systems. Studies include the assessment of vegetation, climate, hydrology, soils, and subsurface geology as determinants of landscape architectural form; natural processes as they relate to the principles of landscape architectural construction.

## 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.
301 Housing and Community Design (4) 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 280.
Open only to LA majors.

302 Planting Design (4) Design problems focusing on the functional, ecological, and aesthetic uses of plants in the landscape.

Prerequisite: LA 211 and 341.
Open only to LA majors.

## 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.

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.
313 Landscape Architectural Engineering 3 (4) Principles and practices of landscape engineering and construction. Emphasizes roadway and parking lot engineering, practices of storm water management, and advanced grading.

Prerequisite: LA 211.
Open only to LA majors.
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 270; or permission of the instructor.

341 Landscape Plants 1 (4) The study of woody and herbaceous plants, including plant identification and plant adaptation to urban and natural environmental conditions.

342 Landscape Plants 2 (3) The study of herbaceous landscape plants including plant identification and landscape cultural requirements. Emphasizes both outdoor and indoor plants.

369 Landscape Architecture Internship (0-1) 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. Offered credit/no credit only.

Prerequisite: LA 302 and 312.

A total of 1 credit may be earned. Open only to LA majors.

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.

## 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.
401 Regional Landscape Design (5) 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.
403 Urban Design (5) 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 401 or permission of the instructor.

Open only to LA majors.
404 Landscape Architecture Comprehensive Project (5)
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.
406 Special Design Studio (2-4) Design studio emphasizing special or unique topics in landscape architecture. 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 the department chairperson.

A total of 4 credits may be earned.
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.

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.
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.
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).

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.

464 Landscape Architectural Design Communications 2
(3) Advanced methods of landscape architectural design
communications using a variety of media.
Prerequisite: CAP 162.
465 Portfolio Preparation (2) The preparation of resumes, portfolios, and brochures related to securing internship positions and other landscape architectural employment.

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.

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.
490 Independent Projects (1-3) 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.

498 Special Projects in Landscape Architecture (1-6) 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.

## URBAN PLANNING

## N. Perera, Interim chairperson

## bsu.edu/urban

The urban planning program prepares students for professional careers as urban planners in the public, nonprofit, and private sectors. Graduates work for city, county, and regional planning agencies or the federal government; planning consultants; community development and other nonprofit organizations; and private firms dealing with urban growth and revitalization in large and small communities. Some may go on to earn PhDs and become researchers or professors.

Planning at Ball State combines physical and policy approaches. Students are taught to improve the design quality of constructed environments while protecting and managing our natural and built environments. Students learn the process of community and economic development as applied to small towns and rural areas as well as urban neighborhoods. Whether as private developers or public officials, graduates are expected to 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.

MAJOR IN URBAN PLANNING AND DEVELOPMENT (BUPD), 82 credits

PREFIX NO SHORT TITLE

| ARCH | 100 | Introduction to Architecture | 2 |
| :--- | :--- | :--- | :--- |
| CAP | 101 | Environment Design and Plan 1 | 3 |
|  | 102 | Environment Design and Plan 2 | 3 |
|  | 161 | Design Communications Media 1 | 2 |
|  | 162 | Design Communications Media 2 | 2 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 485 | Urban Economics (3) |  |
|  | or |  | 3 |
| GEOG | 321 | Urban Geography (3) | 2 |
| LA | 100 | Intro Landscape Architecture | 3 |
| NREM | 101 | Environment and Society | 2 |
| PLAN | 100 | Intro Urb Planning and Dev | 4 |
|  | 202 | Site Plan and Des Studio | 4 |
|  | 203 | Reg Analy and Des Studio | 3 |
|  | 220 | Hist and Thry of Plan 1 | 3 |
|  | 221 | Hist and Thry of Plan 2 | 3 |
|  | 240 | Plan and Priv Dev | 3 |
|  | 261 | Comm and Pres Tech | 4 |
|  | 302 | Urb and Neighbrhd Analy Stdio | 4 |
|  | 303 | Economic Development Studio | 4 |
|  | 320 | Quant Meth for Urb Plan | 0 |
|  | 369 | Planning Internship | 4 |
|  | 401 | Field Studio | 3 |
|  | 452 | Urban Planning Law | 3 |
| POLS | 237 | State and Local Politics |  |
|  | 454 | Pol Admin of Local Gov Budgets (3) |  |
|  | or |  | 3 |

3 credits from
ECON 311 Environmental Economics (3)
NREM 203 Decision-Making in Nat Res Mgt (3)
371 Outdoor Recreation and Socy (3)
POLS 238 Urb Gov in United States (3)
370 Pub Opinion and Pol Behavior (3)
372 Political Campaigns (3)
PSYS 316 Social Psychology (3)

SOC 242 Social Problems (3)
260 Social Interaction (3)
3

9 credits from electives from PLAN

Students are required to complete an internship of three to five months in a professional office with experience involving planning and development.

## MINOR IN URBAN PLANNING AND DEVELOPMENT, 20 credits

PREFIX NO SHORT TITLE CREDITS
PLAN 100 Intro Urb Planning and Dev 2
9 credits from
PLAN 221 Hist and Thry of Plan 2 (3)
421 Urban Land-use Planning (3)
430 Housing and Comm Dev (3)
450 Neighborhood Planning (3)
452 Urban Planning Law (3)
9
9 credits from approved electives from PLAN
20 crs
The minor course of study must be approved by the planning department advisor.

## URBAN PLANNING (PLAN)

100 Introduction to Urban Planning and Development (2)
An introduction to urban planning and development.
Open to all students.
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.
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.
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.

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.

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.

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.

## 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.

## 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.
303 Economic Development Studio (4) Collection, analysis, and communication of information for community- and county-scale economic development planning, including use and interpretation of published data sources, field surveys and inventories, and interviews, as well as development of community assessment and recommendations.

## 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.

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.

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.

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.

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.
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.
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.

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.

## 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.

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.
421 Urban Land-use Planning (3) Principles of urban landuse 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.

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.

428 Urban Impact Analysis (3) Techniques for estimating the environmental, socioeconomic, fiscal, and energy effects of proposed plans and development projects.

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.

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.

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.

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.

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.

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.

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.

441 Sustainable Housing (3) Methods for bringing sustainable design and construction practices into the housing industry, with an emphasis on increasing durability, comfort, and energy efficiency while reducing costs. Use of computer software for economic analysis of design improvements, ensuring code compliance, and determining HERS and energy star ratings.

Prerequisite: permission of the department chairperson.
Prerequisite recommended: PLAN 440.
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.

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.
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.

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.

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.

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.

459 International 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 paid to the applicability of these experiences to American cities.

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.

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.

## 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. Examines 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.

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.

## 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.
## 482 Grant Procurement and Administrators for Planners

(1-3) 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.
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.

## 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.
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.

490 Independent Study in Planning (1-9) 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.

498 Special Projects in Urban Planning and Development (3-9) Special projects in urban planning and development undertaken by groups of students under faculty direction.

A total of 9 credits may be earned.

## MILLER COLLEGE OF BUSINESS

J. Bott, 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 17 baccalaureate majors including accounting, apparel design and fashion merchandising, business administration, business analytics, computer technology, economics (two concentrations), finance, entrepreneurial management, computer information systems, international business, hospitality and food management, human resource management, logistics and supply chain management, professional selling, marketing, risk management and insurance, and residential property management. The business administration major is also available on-line in its entirety. 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.

Teacher education students in the College are required to earn a 2.5 grade-point average in each teaching major or area.

## 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 21 subjects. Note that admission requirements vary by minor.

Note: Some departments have determined that their courses will be open $\underline{\text { ONLY }}$ to business majors or minors.

## MAJOR IN BUSINESS ADMINISTRATION (BA/BS), 72 credits

| PREFIX | NO | SHORT TITLE C | CREDITS |
| :---: | :---: | :---: | :---: |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  |  |  | 45 crs |
| Finance, 6 credits |  |  |  |
| FIN | 445 | Financial Statement Analysis | 3 |
| RMI | 270 | Principles of Risk Mgt and Ins | 3 |
| Marketing, 6 credits from |  |  |  |
| ECON | 301 | Intermediate Microeconomics (3) |  |
| MKG | 310 | Consumer Behavior (3) |  |
|  | 325 | Professional Selling (3) |  |
|  | 345 | Procurement and Supply Mgt (3) |  |
|  | 400 | Product Management (3) |  |
|  | 410 | Marketing Channels (3) |  |
|  | 420 | Integrated Mkg Communications (3) | 3) 6 |

Information Systems and Operations Management, 6 credits from

| ISOM | 300 | Project Management (3) |
| :--- | :--- | :--- |
|  | 355 | Quality Mgt and Lean Six Sigma (3) |
| 452 | Inventory, Warehousing, Negot (3) |  |
| 453 | Manufacturing Plan and Control (3) |  |
|  | 456 | Info Tech and Bus Analytics (3) |
|  | 460 | Global Logistics, Transp Mgt (3) |

6

Management and Human Resources, 6 credits from
BUSA 369 BUSAD Internship (1-3)
ECON 331 Labor Economics (3)
MGT 241 The Entrepreneurial Experience (3)
361 FDN of HR Employee Relations (3)
363 Talent Management (3)
365 Employment Law (3)

467 Leadership and Change MGT (3)
330 Employee Benefits and Ret Plan (3)

| International, 3 credits from |  |  |
| :--- | :--- | :--- |
| ECON | 351 | International Economics (3) |
| FIN | 352 | Global Finance (3) |
| INTB | 265 | Intro to International Bus (3) |
| MGT | 301 | International Mangement (3) |
| MKG | 470 | International Marketing (3) |

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 BUSINESS ANALYTICS (BA/BS), 42-66 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| Business concentration, 66 credits |  |  |  |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  |  |  | 45 crs |
| Business analytics core requirements |  |  |  |
| BA | 305 | Intro to Business Analytics | 3 |
|  | 345 | Data Mining for Bus Analytics | 3 |
|  | 436 | Data Warehouse and Bus Intel | 3 |


|  | 482 | Managing Big Data | 3 |
| :--- | :--- | :--- | :--- |
| ECON | 321 | Advanced Business Statistics | 3 |
|  |  |  |  |
| Required disciplinary analytics |  |  |  |
| ECON | 424 | Econometrics | 3 |
| MKG | 450 | Advanced Mkg Res and Analytics | 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, 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.

Telecommunications concentration, 42 credits
Required pre-telecommunications and departmental courses, 15 credits
TCOM 101 Foundations of TCOM 3

204 Media Analysis and Criticism 3
284 Practical Aspects of Media Law 1
384 Electronic Media Law 3
408 Med Ethics Soc Responsibility 3

| 2 credits from |  |  |  |
| :--- | ---: | :--- | :--- |
| TCOM | 206 | Writing Elec Media Scriptwrtng | 1 |
|  | 207 | Writing Elec Media Copywriting | 1 |
|  |  |  |  |

Business analytics core requirements
BA 305 Intro to Business Analytics 3
345 Data Mining for Bus Analytics 3
436 Data Warehouse and Bus Intel 3
482 Managing Big Data 3
ECON 321 Advanced Business Statistics 3
Required disciplinary analytics
TCOM 306 Programs and Audiences 3
347 Spec Tpcs Sales and Promotion 3
Required core prerequisites

| ISOM | 125 | Micro Apps for Business | 3 |
| :--- | :---: | :--- | :---: |
| ECON | 221 | Business Statistics | 3 |
|  |  |  | 42 crs |

Majors in business analytics/telecommunications concentration may not minor in telecommunications.

Media and communications concentration, 54 credits
Required core courses, 27 credits
JOUR 101 Media and Society
103 Introduction to Visual Comm 3
104 Strategic Writing 3
250 Introduction to Advertising 3

261 Principles of Public Relations

275 Media Law and Ethics 3
348 Strat Comm Emerging Media 3
352 Media Planning 13
382 Media Theory and Research 3

Business analytics core requirements

| BA | 305 | Intro to Business Analytics | 3 |
| :--- | :--- | :--- | :--- |
|  | 345 | Data Mining for Bus Analytics | 3 |
|  | 436 | Data Warehouse and Bus Intel | 3 |
|  | 482 | Managing Big Data | 3 |
| ECON | 321 | Advanced Business Statistics | 3 |

Required disciplinary analytics
JOUR 495 Individual Studies Journalism (.5-12) 6
Junior year: 3 credits journalism
Senior year: 3 credits advertising and public relations
Required core prerequisites
ISOM 125 Micro Apps for Business 3
ECON 221 Business Statistics 3

54 crs
$42-66 \mathrm{crs}$

## MAJOR IN INTERNATIONAL BUSINESS (BA/BS), 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| Miller College of Business core, 45 credits <br> ACC |  |  |  |
|  | 201 | Principles of Accounting 1 |  |
| BL | 202 | Principles of Accounting 2 | 3 |
| ECON | 260 | Principles of Business Law | 3 |
|  | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
| FIN | 221 | Business Statistics | 3 |
| ISOM | 300 | Principles of Finance | 3 |
|  | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |


|  |  | 45 crs |  |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| International Business core, 21 credits |  |  |  |
| ECON | 351 | International Economics | 3 |
| FIN | 352 | Global Finance | 3 |
| INTB | 265 | Intro to International Bus | 3 |
|  | 490 | Seminar in Intl Bus Decision | 3 |
| MGT | 301 | International Management | 3 |
| MKG | 470 | International Marketing | 3 |
| INTB 369 or 300 or an approved elective | 3 |  |  |
|  |  | 21 crs |  |

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

International Studies/Culture requirement 6 credits of approved international studies/culture outside the Miller College of Business.
$\frac{6}{81 \mathrm{crs}}$

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.

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

## MINOR IN BUSINESS ADMINISTRATION

## (See School of Art.)

## MINOR IN FOUNDATIONS OF BUSINESS, 24 credits

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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 20 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  |  |  | $\boxed{24} \mathrm{crs}$ |


| FIN | 300 | Principles of Finance (3) |
| :--- | :--- | :--- |
| MGT | 300 | Managing Behavior in Org (3) |
| MKG | 300 | Principles of Marketing (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, 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.

## MINOR IN INTERNATIONAL BUSINESS, 33 credits

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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| ECON | 351 | International Economics | 3 |
| FIN | 352 | Global Finance | 3 |
| INTB | 265 | Intro to International Bus | 3 |
| MGT | 301 | International Management | 3 |
| MKG | 470 | International Marketing | 3 |
| 3 credits from |  |  |  |
| INTB | 300 | Foreign Field Study in Bus (0-15) |  |
|  |  | Intern in International Bus (1-6) |  |
|  |  | Seminar in Intl Bus Decision (3) | 3 |
| Minor in foreign language |  |  | 15 |

MINOR IN SIX SIGMA, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| ECON | 221 | Business Statistics | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 355 | Quality Mgt and Lean Six Sigma | 3 |
|  | 375 | Six Sigma Foundations | 3 |
|  | 475 | Advanced Six Sigma | 3 |

Electives, 3 credits from
ACC 306 Intermediate Mgmt Accounting (3)
ISOM 300 Project Management (3)
361 Simulation, Modeling, Optimiz (3)
MKG 350 Marketing Res and Analytics (3) 3
18 crs
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.

Students must have credit in ISOM 125 and 210 or equivalents. Open only to Miller College of Business majors.

## BUSINESS ADMINISTRATION (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.

## 299X Experimental/Developmental Topics (1-6) Topics

 relevant to the discipline. Course titles will be announced before each semester.A total of 6 credits may be earned.
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.
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.

369 Internship in Business Administration (1-3) 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.

## INTERNATIONAL BUSINESS 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.

300 Foreign Field Study in Business (0-15) 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.
369 Internship in International Business (1-6) 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.
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.

## ACCOUNTING

## M. Myring, 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 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

| PREFIX |  | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  |  |  | 45 crs |
| ACC | 301 | Intermediate Accounting 1 | 3 |
|  | 302 | Intermediate Accounting 2 | 3 |
|  | 305 | Accounting Info Systems | 3 |
|  | 306 | Intermediate Mgmt Accounting | 3 |
|  | 401 | Introduction to Taxation | 3 |
|  | 410 | Advanced Topics in Taxation | 3 |
|  | 440 | Advanced Financial Accounting | 3 |
|  | 451 | Auditing Principles and Prac | 3 |
| 3 credits from |  |  |  |
| ACC | 420 | Selected Topics Acctg (3) |  |
|  | 430 | Government and Nonprofit Acctg (3) | (3) 3 |
|  |  |  | 72 crs |
| 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. |  |  |  |

## ACCOUNTING (ACC)

200 Accounting for New Ventures (3) A survey course focusing on basic accounting and forecasting for nonaccountants. 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; MGT 241.
Open only to non-business students.
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.
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 minimum grade of $C$.
299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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 202.
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.
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.

Prerequisite: ACC 202.
Prerequisite or parallel: ISOM 125 with a minimum grade of $C$.

## 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.

369 Internship in Accounting (1-6) 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.
401 Introduction to Taxation (3) A study of the basic features of the federal income tax. Emphasizes the determination of taxable income of individuals and corporations.

Prerequisite: minimum grade of $C$ in ACC 201.
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.
420 Selected Topics in Accounting (3) Explores topics of current interest to the accounting profession.

Prerequisite: ACC 302.
Open only to accounting majors.

## 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.
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.
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.
495 Special Topics in Accounting (1-3) 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.

497 Independent Study in Accounting (1-3) 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.

## 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.

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

1) 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.
2) 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.
3) 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.
4) 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. 55).

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, BUSINESS

 CONCENTRATION (BA/BS), 69 credits| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  |  |  | 45 crs |
| ECON | 301 | Intermediate Microeconomics | 3 |
|  | 302 | Intermediate Macroeconomics | 3 |
| 18 credits from 300-400-level ECON electives (may include the following) |  |  |  |
| ACC | 301 | Intermediate Accounting 1 (3) |  |
|  | 302 | Intermediate Accounting 2 (3) | 18 |

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. All students will be required to take the Major Field Test in Economics before graduation.

## MAJOR IN ECONOMICS, FINANCIAL ANALYST CONCENTRATION (BA/BS), 72 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 |  |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  |  |  | 45 crs |
|  |  |  |  |
|  |  |  | 3 |
| ACC | 301 | Intermediate Accounting 1 | 3 |
|  | 302 | Intermediate Accounting 2 | 3 |
| ECON | 301 | Intermediate Microeconomics | 3 |
|  | 302 | Intermediate Macroeconomics | 3 |
| FIN | 441 | The Theory of Monetary Policy | 3 |
|  | 301 | Intermediate Finance | 3 |



Core Curriculum math requirement. All students will be required to take the Major Field Test in Economics before graduation. The economics and law concentration is appropriate for pre-law students; the financial economics concentration is appropriate for students who are interested in financial analyst careers.

## MINOR IN ECONOMICS, 18 credits

Open to both business and non-business majors.
PREFIX NO SHORT TITLE
CREDITS
ECON 201 Elementary Microeconomics 3
202 Elementary Macroeconomics
12 credits from electives in ECON with at least 9 credits from 300- or 400-level courses

## TEACHER EDUCATION

## TEACHING MAJOR IN SOCIAL STUDIES (BA/BS), 99 credits

See Teaching Major in Social Studies, College of Sciences and Humanities, p. 262, for total requirements for this area.

| PREFIX | NO | SHORT TITLE |
| :--- | :---: | :---: |$\quad$ CREDITS

Refer to the Department of Economics listings, p. 87, for descriptions of these courses.

## ECONOMICS (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.

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)

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.
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 $132,161,162,165$, or 166 and a $C$ or higher grade in ISOM 125.

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.

## 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.
299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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 minimum grade of $C$; ECON 202.

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 minimum grade of $C$; ECON 202.

## 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 201.

## 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 201.
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 201 or permission of the instructor.

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.

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.

Prerequisite: ECON 201 and ECON 221.
331 Labor Economics (3) Students learn how labor is allocated under various institutional settings. Topics include: slavery, labor unions, discrimination, compensating wage differentials, comparable worth, 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 201.
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.

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.
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.
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 201 or 247 or permission of the instructor.

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 in ECON 201.

351 International Economics (3) Examines international trade, finance, and commercial policy.

Prerequisite: minimum grade of $C$ in ECON 201.
369 Internship in Economics (1-6) 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 302; permission of the department chairperson.

A total of 6 credits may be earned.
Open only to economics majors or minors and secondsemester junior or senior standing.

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.
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.
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.

## 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.

390 Honors Colloquium in Economics (1-3) 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.

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.

421 Mathematical Economics (3) Use of mathematics in the development of selected economic theories. Survey of inputoutput 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; MATH 132 or its equivalent.

424 Econometrics (3) Applies 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 to economic and business data.

Prerequisite: ECON 201 with a minimum grade of C; ECON 202, and either ECON 321 or MATH 321 or permission of the department chairperson.

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.

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.

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.
492 Readings and Directed Study in Economics (1-3)
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.

495 Seminar in Economics (1-3) 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.

## 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

| PREFIX | NO | SHORT TITLE | CREDITS |  |
| :--- | :--- | :--- | :--- | :---: |
|  |  |  |  |  |
| Miller College of Business core, 45 credits |  |  |  |  |
| ACC | 201 | Principles of Accounting 1 |  |  |
|  | 202 | Principles of Accounting 2 | 3 |  |
| BL | 260 | Principles of Business Law | 3 |  |
| ECON | 201 | Elementary Microeconomics | 3 |  |
|  | 202 | Elementary Macroeconomics | 3 |  |
|  | 221 | Business Statistics | 3 |  |
| FIN | 300 | Principles of Finance | 3 |  |
| ISOM | 125 | Micro Apps for Business | 3 |  |
|  | 210 | Business Information Systems | 3 |  |
|  | 249 | Foundations of Business Comm | 3 |  |
|  | 351 | Operations Management | 3 |  |
| MATH | 132 | Brief Calculus | 3 |  |
| MGT | 300 | Managing Behavior in Org | 3 |  |
|  | 491 | Bus Policy and Strategy Mgt | 3 |  |
| MKG | 300 | Principles of Marketing | 3 |  |
|  |  |  | 45 crs |  |

Finance core (required of all finance majors), 18 credits
FIN 301 Intermediate Finance 3
310 Investments ..... 3
320 Markets and Institutions ..... 3
410 Portfolio Management ..... 3
420 Treasury Management ..... 3
490 Decision Making in Finance ..... 3
18 crs

Electives, 9 credits from
ACC 301 Intermediate Accounting 1 (3)
302 Intermediate Accounting 2 (3)
305 Accounting Info Systems (3)
306 Intermediate Mgmt Accounting (3)
401 Introduction to Taxation (3)
BL 367 Principles of Estate Planning (3)
ECON 301 Intermediate Microeconomics (3)
302 Intermediate Macroeconomics (3)
421 Mathematical Economics (3)
424 Econometrics (3)
441 The Theory of Monetary Policy (3)

| FIN | 352 | (3) |  |
| :---: | :---: | :---: | :---: |
|  | 369 | Finance Internship (3 or 6) |  |
|  | 445 | Financial Statement Analysis (3) |  |
|  | 497 | Independent Study - Finance (3) |  |
| RMI | 270 | Principles of Risk Mgt and Ins (3) |  |
|  | 330 | Employee Benefits and Ret Plan (3) | 9 |
| 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. |  |  |  |

## PREFIX NO SHORT TITLE

CREDITS

Miller College of Business core, 45 credits
ACC 201 Principles of Accounting 1 3

202 Principles of Accounting 2 3
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
202 Elementary Macroeconomics 3
221 Business Statistics
FIN 300 Principles of Finance 3
ISOM 125 Micro Apps for Business 3
210 Business Information Systems 3
249 Foundations of Business Comm 3
351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Org 3
491 Bus Policy and Strategy Mgt 3
MKG 300 Principles of Marketing 3
45 crs
RMI core (required of all RMI majors), 15 credits
RMI 270 Principles of Risk Mgt and Ins 3
330 Employee Benefits and Ret Plan 3
377 Operations of Ins Enterprises 3
378 Commercial Risk Mgt and Ins 3
474 Corporate Risk Management 3

15 crs
Electives, 3 credits from
ACC 401 Introduction to Taxation (3)
FIN 320 Markets and Institutions (3)
410 Portfolio Management (3)
445 Financial Statement Analysis (3)
MGT 361 FDN of HR Employee Relations (3)
MKG 325 Professional Selling (3)

RMI 369 Risk Mgt and Ins Internship (3-6)
401 Health Care Risk Management (3)
473 Insurance Law (3)
497 Independent Study in RMI (1-6)

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.

## MINOR IN FINANCIAL PLANNING, 27 credits

Open to all majors.
PREFIX NO SHORTTITLE CREDITS
ACC 201 Principles of Accounting $1 \quad 3$
BL 260 Proction
BL 260 Principles of Business Law 3
367 Principles of Estate Planning 3
FIN 300 Principles of Finance 3
310 Investments 3
480 Financial Planning Process 3
RMI 270 Principles of Risk Mgt and Ins 3
330 Employee Benefits and Ret Plan

## MINOR IN RISK MANAGEMENT AND INSURANCE, 15 credits

Open to all majors, except risk management and insurance.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| RMI | 270 | Principles of Risk Mgt and Ins | 3 |
|  | 378 | Commercial Risk Mgt and Ins | 3 |
|  | 474 | Corporate Risk Management | 3 |
| 3 credits from |  |  |  |
| BL | 260 | Principles of Business Law (3) |  |
| FIN | 300 | Principles of Finance (3) | 3 |
|  |  |  |  |
| 3 credits from |  |  |  |
| RMI | 330 | Employee Benefits and Ret Plan (3) |  |
|  | 369 | Risk Mgt and Ins Internship (3) |  |
|  | 377 | Operations of Ins Enterprises (3) |  |
|  | 473 | Insurance Law (3) |  |
|  |  |  | 15 crs |

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.

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.
367 Estate Planning and Administration (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.

## 497 Independent Study in Business Law (1-6) 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.

## FAMILY AND CONSUMER SCIENCES (FCS)

135 Financial Literacy (1) Development of knowledge and skills to promote financial wellness through the lifespan. Includes spending plans, credit strategies, depository institutions, consumer protection, insurance investment and retirement planning. Exploration of consumer tools to enhance financial literacy.

## 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.
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)

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.
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.
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.
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.
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.
369 Internship in Finance ( $\mathbf{3}$ 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.
410 Portfolio Management (3) Advanced topics in investments including security analysis and portfolio management techniques, valuation and performance evaluation.

Prerequisite: FIN 300 and 310.

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 320.
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.
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.

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 310 and 320.
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, 410, 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.

## 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.

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 TCST 420.

## RISK MANAGEMENT AND 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.

## 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.
369 Internship in Risk Management and Insurance (3-6)
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.
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.
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.
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.

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.

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.

497 Independent Study in Risk Management and
Insurance (1-6) 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.

# INFORMATION SYSTEMS AND OPERATIONS MANAGEMENT 

## J. Ledbetter, Interim Chairperson

## bsu.edu/isom

The Computer Information Systems (CIS) major provides students with the technical, analytical skills, and knowledge for design, implementation, and maintenance of computer information systems in business and other organizations. As a graduate of the Computer Information Systems program, students find job opportunities as a systems analyst, application developer, business analyst, computer support specialist, consultant, hardware salesman, information center consultant, software salesman, project manager, or information systems manager, network administrator, database administrator, Web administrator, e-commerce analyst, information security expert, webmaster, network support and administration, information officer and technical/end user support. Our CIS graduates go to work for global services firms, IT consulting firms, public accounting firms, defense industry firms, hospitals, banks, management consulting firms, federal and state government, software companies, consulting companies, computer and networking companies, telecommunications companies, airline industry, computer industry, insurance companies, Web design firms, and universities.

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 inbound 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, multimodal 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 COMPUTER INFORMATION SYSTEMS (BA/BS), 69 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
| Information systems core, 21 credits |  |  |  |
| CIS | 226 | Business Systems App Dev | 3 |
|  | 317 | Computer Networks for Business | 3 |
|  | 410 | Information Systems Security | 3 |
|  | 412 | Business Proc Analysis \& Des | 3 |
|  | 413 | Database Management Systems | 3 |
|  | 490 | Information Systems Integ Proj | 3 |
| ISOM | 300 | Project Management | 3 |
| Electives (choose one course for 3 credits) |  |  |  |
| ISOM | 369 | Industry Internship (3) |  |
| CIS | 421 | Network \& Security Management |  |
|  | 422 | Health Care Inform Systems (3) |  |
|  | 450 | E-Commerce Design/Application | (3) |

69 crs
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 COMPUTER TECHNOLOGY (BA/BS), 76 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.

PREFIX NO SHORT TITLE
CREDITS
Core requirement, 43 credits
CS 110 Intro Comp Sci and Web Prog 3
120 Computer Science $1 \quad 4$
TCMP 111 Computer Assembly Trblshooting 3
210 Fundamentals of Network Design 3
211 System Admin Fundamentals 3
221 Alt PC Operating Systems 3
310 Internetwork Design Admin 3
311 Infrastructure Services 3
321 Alt Server Operating Systems 3
340 Wireless Networks 3
385 Internship in Computer Tech (1-3) 3
465 Enterprise Security Admin 3
466 Capstone Computer Technology 3
One of the following
$\begin{array}{lll}\text { CS } & 124 & \text { Discrete Structures (3) } \\ & \text { or } & \\ \text { MATH } & 132 & \text { Brief Calculus (3) } \\ & \text { or } & \\ & 161 & \text { Applied Calculus } 1 \text { (3) } \\ & \text { or } & \\ & 162 & \text { Applied Calculus } 2 \text { (3) }\end{array}$

Electives, 15 credits from (choose 5)

TCMP 264 Fund of Defensive Security (3)
265 Fund of Offensive Security (3)
270 Computer Industrial Electronic (3)
299X Special Topics in Computer Tec (3)
300 Sustainability in Info Tech (3)
330 Internet Switching and Design (3)
363 Intrusion Prevent and Response (3)
371 Voice over IP Network - VoIP (3)
380 Electronic Communication Admin (3)
410 Scalable Internetworking (3)
421 Data Storage Disaster Recovery (3)
430 Convergent Network Systems (3)
440 Directory Services (3)
450 Enterpri Infrastructure Design (3)
464 Industrial Network Security (3)
499 Prob in Computer Technology (3)
TDPT 299X Experimental Development Topic (3) 15
Complete the following required minor
Minor in Business Administration for Computer
Technology, 18 credits

| CIS | 226 | Business Systems App Dev | 3 |
| :--- | :--- | :--- | :---: |
|  | 413 | Database Management Systems | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
| MGT | 300 | Project Management | 3 |
|  | 300 | Managing Behavior in Org | 3 |
|  |  |  | $\overline{18 \mathrm{crs}}$ |
|  |  |  | 76 crs |

## MAJOR IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT (BA/BS), 63 credits

## PREFIX NO SHORT TITLE

CREDITS
Miller College of Business core, 45 credits
ACC 201 Principles of Accounting $1 \quad 3$

202 Principles of Accounting 2 3
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
202 Elementary Macroeconomics 3
221 Business Statistics 3
FIN 300 Principles of Finance 3
ISOM 125 Micro Apps for Business 3
210 Business Information Systems 3
249 Foundations of Business Comm 3
351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Org 3
491 Bus Policy and Strategy Mgt 3
MKG 300 Principles of Marketing 3

Logistics and supply chain management core, 15 credits
ISOM 361 Simulation, Modeling, Optimiz 3
369 Industry Internship (3-6) 3
453 Manufacturing Plan and Control 3
460 Global Logistics, Transp Mgt 3
480 Supply Chain Mgt Integ Project 3
15 crs
Electives (choose any one from the list), 3 credits from
ISOM 300 Project Management (3)
355 Quality Mgt and Lean Six Sigma (3)
452 Inventory, Warehousing, Negot (3)
456 Info Tech and Bus Analytics (3)

63 crs
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, $161,162,165$, or 166 and a $C$ or higher grade in ISOM 125. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement.

## MINOR IN BUSINESS INFORMATION TECHNOLOGY, 15 credits

For non-business majors only.

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 228 | Adv Micro Apps for Business | 3 |
|  | 249 | Foundations of Business Comm | 3 |
| One course from |  |  |  |
| CIS | 226 | Business Systems App Dev (3) |  |
|  | 317 | Computer Networks for Business (3) |  |
|  | 450 | E-Commerce Design/Applications (3) |  |
| ISOM | 300 | Project Management (3) |  |
|  | 340 | Multi and Web Publish for Bus (3) | 3 |

ENG 104 is a prerequisite for ISOM 249.
MINOR IN COMPUTER TECHNOLOGY, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| TCMP | 111 | Computer Assembly Trblshooting | 3 |
|  | 210 | Fundamentals of Network Design | 3 |
|  | 211 | System Admin Fundamentals | 3 |
|  | 310 | Internetwork Design Admin | 3 |
|  | 311 | Infrastructure Services | 3 |
| TCMP elective course |  |  | 3 |

## MINOR IN FOUNDATIONS OF COMPUTER SYSTEMS, 22-24 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| CS | 120 | Computer Science 1 | 4 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
| TCMP | 111 | Computer Assembly Trblshooting | 3 |
| 3-4 credits from |  |  |  |
| MATH | 161 | Applied Calculus 1 (3) |  |
|  | or |  |  |
|  | 165 | Calculus 1 (4) | $3-4$ |

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

| CIS | 226 | Business Systems App Dev (3) |  |
| :--- | :--- | :--- | :---: |
| CS | 121 | Computer Science 2 (4) |  |
|  | 310 | Web Programming (3) |  |
| ISOM | 300 | Project Management (3) |  |
| TCMP | 221 | Alt PC Operating Systems (3) | $6-7$ |
|  |  |  | $22-24 \mathrm{crs}$ |

## MINOR IN INFORMATION SYSTEMS FOR COMPUTER SCIENCE MAJORS, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CIS | 412 | Business Proc Analysis \& Des | 3 |
|  | 450 | E-Commerce Design/Applications | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 300 | Project Management | 3 |

One course from
CIS 413 Database Management Systems (3)
490 Information Systems Integ Proj (3)
ISOM 415 Information Systems Management (3)
430 ERP App and Process Integ (3) 3
18 crs

MINOR IN INFORMATION SYSTEMS FOR NON-COMPUTER SCIENCE MAJORS, 18 credits

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| CIS | 226 | Business Systems App Dev | 3 |
|  | 413 | Database Management Systems | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 300 | Project Management | 3 |
| One course from |  |  |  |
| CIS | 410 | Information Systems Security (3) |  |
|  | 412 | Business Proc Analysis \& Des (3) |  |
|  | 450 | E-Commerce Design/Applications (3) | (3) |
| ISOM | 415 | Information Systems Management (3) | (3) |
|  | 430 | ERP App and Process Integ (3) | 3 |
|  |  |  | 18 crs |
| MINOR IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT, 15 credits |  |  |  |
| PREFIX | NO | SHORT TITLE CR | CREDITS |
| ISOM | 300 | Project Management | 3 |
|  | 351 | Operations Management | 3 |
|  | 355 | Quality Mgt and Lean Six Sigma | 3 |
|  |  |  | 9 crs |
| Electives (choose two courses from) |  |  |  |
| ISOM | 361 | Simulation, Modeling, Optimiz (3) |  |
|  | 452 | Inventory, Warehousing, Negot (3) |  |
|  | 453 | Manufacturing Plan and Control (3) |  |
|  | 460 | Global Logistics, Transp Mgt (3) | 6 |

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. Students must have credit in ISOM 125 and 210 or equivalent.

## MINOR IN NETWORK ADMINISTRATION FOR NON-COMPUTER TECHNOLOGY MAJORS, 18 credits

PREFIX NO SHORT TITLE CREDITS

Required courses
TCMP 210 Fundamentals of Network Design 3
310 Internetwork Design Admin

|  | 330 | Internet Switching and Design |
| :--- | :--- | :--- |
| 340 | Wireless Networks | 3 |
| 410 | Scalable Internetworking | 3 |
|  |  | 3 |
| Electives, | 3 |  |
| TCMP | 371 | Voice over IP Network - VoIP (3) |
|  | 430 | Convergent Network Systems (3) |

18 crs
Not open to students with a computer technology major.
MINOR IN SIX SIGMA, 18 credits (See Interdepartmental in the Miller College of Business.)

## TEACHING MAJOR IN BUSINESS EDUCATION (BA/BS), 97 credits

There is a college moratorium on admission to this degree.

## CERTIFICATE IN BUSINESS TECHNOLOGY, 15 credits

(See Certificates on page 21.)

## BUSINESS ANALYTICS (BA)

305 Introduction to Business Analytics (3) Introduction to data-driven business management and business analytics. Provides the business rationale for leveraging analytics to improve organizational performance and the challenges businesses face on analytics. Introduces the basics 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 analysis.

Parallel: ECON 321.
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 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: BA 305, ECON 321, or permission of the department chairperson.

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: BA 345 or permission of the department chairperson.

482 Managing Big Data (Capstone Course) (3) Introduces students to the analysis of unstructured data. Applies the skills such as data mining, visualization, and other techniques learned in prior business analytics courses to data that is not organized within a relational database. Incorporates an introduction to unstructured Big Data, the business analytics lifecycle, machine learning (ML), R \& RS Studio, as well as data management ecosystems such as Hadoop (Map Rescue, HDFS, Storm, Kafka, Cassandra). The lab exercises focus on analyzing unstructured data.

Prerequisite: BA 436 or permission of the department chairperson.

## 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.

## 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.

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.
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.

## 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.

## 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.

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.

## 497 Independent Study: Business or Marketing

 Education, Business Information Technology (1-6) 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.

## COMPUTER INFORMATION 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.

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.

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.

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.

413 Database Management Systems (3) Concepts of database management systems, data models, the entityrelationship (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 226 or permission of the department chairperson.

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, 410, or permission of the department chairperson.

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.

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.

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.

## INFORMATION SYSTEMS AND OPERATIONS MANAGEMENT (ISOM)

112 Document Processing (3) Development of document processing skills, emphasizing speed, accuracy, communication and language arts skills, and efficiency in processing of information with information processing software.

Prerequisite: entry-level proficiency of 35 gross words per minute; basic formatting knowledge and skill.

## 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.

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.
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.

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.

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.

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.
299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

## 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.

## 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.

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.
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.

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.
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.

Prerequisite or parallel: ISOM 351 or permission of the department chairperson.

## 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.
369 Industry Internship (3-6) 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.

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: ISOM 355.
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: ISOM 311; senior standing.
414 Information Systems of Small Business (3) Computerbased 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: MGT 300, 341.
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.

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.
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: ISOM 311, 313; or permission of the department chairperson.

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.
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.

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.
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.

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.

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.

## 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.

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.

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.

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 selfreflection, connected learning, and interactive collaboration as an online learning community.

Prerequisite: ISOM 365.
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: ISOM 375.
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: ISOM 361, 453, 460 or permission of the department chairperson.

Open only to logistics and supply chain management majors.

497 Independent Study (1-6) 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, 497, and 498.

A total of 9 credits may be earned, but no more than 6 in any one semester or term.

## 498 Seminar in Information Systems or Logistics and

 Supply Chain Management (1-3) 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, 497, and 498.

A total of 9 credits may be earned, but no more than 3 in any one semester or term.

## TECHNOLOGY: COMPUTER TECHNOLOGY (TCMP)

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.

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.
211 System Administration Fundamentals (3) Introduction to the fundamentals of system administration in a clientserver environment. Focus on the management of resources on prevailing network operating systems.

Prerequisite: minimum grade of $C$ - in TCMP 111.
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 TCMP 111.
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.
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.
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.

## 299X Special Topics in Computer Technology (1-6)

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.
300 (400) 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.
Not open to students who have credit in TCMP 400.
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 TCMP 210.
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 TCMP 211.
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: TCMP 211 and 221.
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 TCMP 310 .
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 TCMP 210.
Prerequisite or parallel: TCMP 310.
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 TCMP 264 and 265.
371 Voice over Internet Protocol Networking (3) Focuses on the hardware and infrastructure need for Voice over IP (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 TCMP 310.
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 TCMP 311.
385 Internship in Computer Technology (1-3) 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.
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 TCMP 310 .
Open only to juniors or seniors.
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 TCMP 311.
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 TCMP 310 and 311.

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 TCMP 311.
450 Enterprise Infrastructure Design (3) Students will explore the requirements for establishing an enterprise level information technology infrastructure. Included will be an indepth study of datacenter design.

Prerequisite: minimum grade of $C$ - in both TCMP 310 and 311.

Open only to juniors or seniors.
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 TCMP 264 and 265.

465 Enterprise Security Administration (3) This course 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 operations.

Prerequisite: senior standing.
Open only to Computer Technology: Cyber concentration majors.

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.

499 Problems in Computer Technology (1-3) Individual advanced study and experimentation in computer technology.

Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

## 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.

Other majors offered by the department include business administration, hospitality and food management and residential property management.

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

## ASSOCIATE IN SCIENCE-BUSINESS ADMINISTRATION—MANAGEMENT (AS), 60 credits

There is a college moratorium on admission to this degree.

## MAJOR IN ENTREPRENEURIAL MANAGEMENT (BA/BS), 72 credits

## PREFIX NO SHORT TITLE

CREDITS
Miller College of Business core, 45 credits
ACC 201 Principles of Accounting 1
202 Principles of Accounting 2

BL 260
ECON
201
202
221
FIN 300
ISOM
125
210
249
351
MATH
MGT
MKG

Principles of Business Law
Elementary Microeconomics ..... 3
Elementary Macroeconomics ..... 3
Business Statistics ..... 3
Principles of Finance ..... 3
Micro Apps for Business ..... 3
Business Information Systems ..... 3
Foundations of Business Comm ..... 3
Operations Management ..... 3
Brief Calculus ..... 3
Managing Behavior in Org ..... 3
491 Bus Policy and Strategy Mgt ..... 3Principles of Marketing


| 6 credits from |  |  |  |
| :---: | :---: | :---: | :---: |
| COMM | 330 | Small Group Decision Making (3) |  |
|  | 351 | Organizational Communication (3) |  |
| ECONMGT | 331 | Labor Economics (3) |  |
|  | 301 | International Management (3) |  |
|  | 369 | Management Internship (1-3) |  |
|  | 463 | Global Human Resource MGT (3) |  |
|  | 467 | Leadership and Change MGT (3) | 6 |
|  |  |  | 69 crs |
| 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 . MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. |  |  |  |
| MAJOR IN RESIDENTIAL PROPERTY MANAGEMENT (BA/BS), 69-72 credits |  |  |  |
| PREFIX | NO | SHORT TITLE | CREDITS |
| ACC | 201 | Principles of Accounting 1 | 3 |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or |  |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
| FCFN | 210 | Customer Service | 3 |
| FCPM | 104 | Housing Decisions | 3 |
|  | 123 | Interior Design Basics | 3 |
|  | 235 | Intro to RPM | 3 |
|  | 275 | Market Leasing Resident Prop | 3 |
|  | 305 | Maintenance for Prop Mgr | 3 |
|  | 315 | Sr Housing: Dsgn, Mkg, and Mgt | 3 |
|  | 330 | Apt Financial Management | 3 |
|  | 350 | Residential Equip, Energy Tech | 3 |
|  | 369 | RPM Internship | 3 or 6 |
|  | 375 | Simulation in RPM | 3 |
|  | 400 | Housing and Society | 3 |
|  | 405 | Mgt of Gov Assisted Housing | 3 |
|  | 425 | RPM Project | 3 |
|  | 435 | Trends Issues in RPM | 3 |
| FCS | 103 | FCS Body of Knowledge | 3 |
|  | 403 | FCS in Practice | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
| MKG | 300 | Principles of Marketing | 3 |
| RE | 230 | Real Estate Principles | 3 |
| TDPT | 213 | Int Const Mat Pro Prod | 3 |

$69-72 \mathrm{crs}$
Students pursuing the residential property management major must meet the following additional requirements:

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

MINOR IN ENTREPRENEURIAL MANAGEMENT, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| ACC | 201 | Principles of Accounting 1 (3) |  |
|  | or |  |  |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or |  |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
| MGT | 241 | The Entrepreneurial Experience | 3 |
|  | 342 | Marketing for New Ventures | 3 |
|  | 343 | Venture Leadership | 3 |
|  | 345 | Management of New Ventures | 3 |
|  |  |  |  |
| 3 credits from |  |  |  |
| COMM | 375 | Presentational Communication (3) |  |
| INTB | 265 | Intro to International Bus (3) |  |
| MGT | 243 | Dynamics of Family Business (3) |  |
|  | 244 | Social Entrepreneurship (3) |  |
|  | 300 | Managing Behavior in Org (3) |  |
|  | 301 | International Management (3) |  |
|  | 361 | FDN of HR Employee Relations (3) |  |
|  | 399 | Management Practicum (1-6) |  |
| MKG | 497 | Independent Study (1-9) |  |
| RMI | 300 | Principles of Marketing (3) |  |
|  | 270 | Principles of Risk Mgt and Ins (3) | 3 |
|  |  |  | 18 crs |

## MINOR IN FOOD MANAGEMENT, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| FCFN | 105 | Hospitality Foodserv Industry | 1 |
|  | 110 | Prin Food Prep and Food Serv | 3 |
|  | 147 | Foodservice Sanitation | 1 |
|  | 220 | Meal Design and Presentation | 3 |
|  | 400 | Restaurant Management | 4 |
|  | 475 | Catering for Profit | 3 |
| NUTR | 275 | Personal Nutrition | 3 |

18 crs

## 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.

PREFIX NO SHORT TITLE
CREDITS

ACC 201 Principles of Accounting 1
ECON 116 Survey of Economic Ideas (3)

|  | or |  |  |
| :---: | :---: | :---: | :---: |
|  | 201 | Elementary Microeconomics (3) | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 251 | Introductory Operations Mgt | 3 |
| MGT | 241 | The Entrepreneurial Experience | 3 |
|  | 300 | Managing Behavior in Org |  |
|  | 361 | FDN of HR Employee Relations | 3 |
|  |  |  | 24 crs |
| The prerequisite for ISOM 210 is $C$ or better grade in ISOM 125. |  |  |  |
| MINOR IN HOSPITALITY MANAGEMENT, 22 credits |  |  |  |
| PREFIX | NO | SHORT TITLE | CREDITS |
| ACC | 201 | Principles of Accounting 1 | 3 |
| FCFN | 105 | Hospitality Foodserv Industry | 1 |
|  | 210 | Customer Service | 3 |
|  | 250 | Lodging Management | 3 |
|  | 300 | Cost Control Hosp and Food Ind | 3 |
|  | 376 | Intro Event Management | 3 |
|  | 450 | Strategic Lodging Operation | 3 |
|  | 477 | Advanced Event Management | 3 |

## 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

## PREFIX NO <br> SHORT TITLE

CREDITS

ECON 116 Survey of Economic Ideas (3) or 201 Elementary Microeconomics (3)3

MGT

The Entrepreneurial Experience
3

300 Managing Behavior in Org 3
361 FDN of HR Employee Relations 3
363 Talent Management 3
467 Leadership and Change MGT 3
3 credits from
COMM 251 Bus and Prof Comm (3)
325 Interviewing (3)

| 330 | Small Group Decision Making (3) |  |
| :--- | :--- | :---: |
| 340 | Leadership Communication (3) |  |
| 351 | Organizational Communication (3) | 3 |
|  |  | 21 crs |


| Concentration 2: For majors in human resource management, entrepreneurial management, or business administration, 21 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| COMM | 251 | Bus and Prof Comm | 3 |
|  | 325 | Interviewing | 3 |
|  | 330 | Small Group Decision Making | 3 |
|  | 340 | Leadership Communication | 3 |
|  | 351 | Organizational Communication | 3 |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or |  |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
| 3 credits from |  |  |  |
| MGT | 241 | The Entrepreneurial Experience (3) |  |
|  | 300 | Managing Behavior in Org (3) |  |
|  | 361 | FDN of HR Employee Relations (3) |  |
|  | 363 | Talent Management (3) |  |
|  | 467 | Leadership and Change MGT (3) | 3 |
|  |  |  | 21 c |

Concentration 3: For other majors (requires permission of Comm Studies chair), 21 credits
ECON 116 Survey of Economic Ideas (3)
or
201 Elementary Microeconomics (3)
3
9 credits from
COMM 251
Bus and Prof Comm (3)
325 Interviewing (3)
330 Small Group Decision Making (3)
340 Leadership Communication (3)
351 Organizational Communication (3) 9
9 credits from
MGT 241
The Entrepreneurial Experience (3)
Managing Behavior in Org (3)
FDN of HR Employee Relations (3)
Talent Management (3)
Leadership and Change MGT (3) 9
21 crs

## MINOR IN RESIDENTIAL PROPERTY <br> MANAGEMENT, 21 credits

PREFIX NO SHORT TITLE
CREDITS

FCPM 104 Housing Decisions
3
235 Intro to RPM 3

|  | 275 | Market Leasing Resident Prop | 3 |
| :---: | :---: | :---: | :---: |
|  | 305 | Maintenance for Prop Mgr | 3 |
| 6 credits from |  |  |  |
| FCFN | 210 | Customer Service (3) |  |
| FCPM | 123 | Interior Design Basics (3) |  |
|  | 315 | Sr Housing: Dsgn, Mkg, and Mgt (3) |  |
|  | 350 | Residential Equip, Energy Tech (3) |  |
|  | 405 | Mgt of Gov Assisted Housing (3) | 6 |
| 3 credits from |  |  |  |
| ACC | 201 | Principles of Accounting 1 (3) |  |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or 201 | Elementary Microeconomics (3) |  |
| MGT | 300 | Managing Behavior in Org (3) |  |
| MKG | 300 | Principles of Marketing (3) |  |
| RE | 230 | Real Estate Principles (3) |  |
| TDPT | 213 | Int Const Mat Pro Prod (3) | 3 |
|  |  |  | 21 crs |
| Students pursuing the Minor in Residential Property |  |  |  |
| Management must meet the following additional requirements: |  |  |  |
| - Sit for the National Apartment Leasing Professional (NALP) exam. |  |  |  |

## CERTIFICATE IN APARTMENT MANAGEMENT, 24 credits

(See Certificates on page 21.)

## CERTIFICATE IN FACILITIES MANAGEMENT, 24 credits

(See Certificates on page 21.)

## FAMILY AND CONSUMER SCIENCES: FOODS AND NUTRITION (FCFN)

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.

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.

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).

210 Customer Service (3) Concentrates on building quality service skills and knowledge needed to foster excellent customer relations.

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: FCFN 110.
222 Advanced Culinary Techniques and Menu Design (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: FCFN 110.
Not open to students who have credit in FCFN 220.
Open only to hospitality and food management majors.
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 and hospitality management minors.

## 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.

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.
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: FCFN 147 and 210 and 250 and 376 or 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 program director or department chairperson.

Open only to hospitality and food management majors.

## 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 and hospitality management minors.

395 Food and Culture (3) Explores the relationships between agricultural practices, diet patterns, food procurement and distribution, nutrition, 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.

Prerequisite: NUTR 240 or 275 or 340.

## 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: FCFN 147 and 220 or 222.
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: FCFN 250.
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: FCFN 147 and 220 or 222.
477 Advanced Event Management (3) Exploration of principles of management relating to special events, meetings, exhibits, catered functions and their intra-industry interaction.

Prerequisite: FCFN 376.
496 Seminar in Foods and Nutrition (1-6) 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.

## FAMILY AND CONSUMER SCIENCES: PROPERTY MANAGEMENT (FCPM)

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.
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.
235 Introduction to Residential Property Management (3)
Introduction to professional practices in residential property management. Identification and exposure to career opportunities in the field.

255 Facilities Management (3) An introduction to professional practices in facilities management. Identification of and exposure to career opportunities in the field.

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: FCPM 104, 235.
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: FCPM 235 or permission of the department chairperson.

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: FCPM 235 and junior standing, or permission of the department chairperson.

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: FCPM 369; RE 230; junior standing.
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.
369 RPM Internship ( $\mathbf{3}$ 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 FCPM 275 and 305 and FCFN 210; permission of the department chairperson.

A total of 12 credits may be earned, but no more than 6 in any one semester or term.

## 375 Simulation in Residential Property Management (3)

 Application of residential property management skills practiced through a simulation activity.Prerequisite: FCPM 330; junior standing.
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: FCPM 104; junior or senior standing.

## 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: FCPM 235; junior standing.

## 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: FCPM 330; senior standing or permission of the department chairperson.

## 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: FCPM 369 and senior standing, or permission of the department chairperson.

## FAMILY AND CONSUMER SCIENCES (FCS)

400 Family and Consumer Sciences Field Studies (3-6) 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.

## 494 Workshop: Family and Consumer Sciences (1-3)

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.

495 Independent Study in Family and Consumer Sciences
(1-3) 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 in any one semester or term.

## 496 Seminar in Family and Consumer Sciences (l-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.

## 497 Immersive Learning Experience in Family and

 Consumer Sciences (1-3) 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.

## MANAGEMENT (MGT)

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.

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.

244 Social Entrepreneurship (3) Exploration of ventures started for social good, whether not-for-profit or for-profit. Examines implications of starting ventures for the greater good of society.

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.

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.

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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 201.

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.
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.
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: MGT 241.
Open only to entrepreneurial management majors.
342 Marketing for New Ventures (3) A survey course covering the 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 201 or ACC 201 with a minimum grade of $C$; MGT 241.

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 201 or ACC 201 with a minimum grade of $C$; MGT 241.

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 201 or ACC 201 with a minimum grade of $C$; MGT 241, 342.

Prerequisite or parallel: MGT 343.
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: MGT 341.
Open only to entrepreneurial management majors.
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: MGT 346.
Open only to entrepreneurial management majors.

## 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, andtransfer of workers; working conditions; employee services and industrial relations.

## Prerequisite or parallel: MGT 300.

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.
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.
369 Management Internship (1-6) 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: entrepreneurial management majors: MGT 346; permission of the department chairperson or internship supervisor; human resources: MGT 300; permission of the department chairperson or internship supervisor.

A total of 6 credits may be earned.
Open only to entrepreneurial management majors or human resource management majors.

## 390 Honors Colloquium: Readings in Contemporary

Business (1-6) 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.

399 Management Practicum (1-6) 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.

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.

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: MGT 347 and 443.
Open only to entrepreneurial management majors.
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: MGT 241, 346; FIN 300.
Open only to entrepreneurship management majors.
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: MGT 347, 443.
Open only to entrepreneurial management majors.
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.
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.
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.
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 300.

## 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.

## 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.

## 495 Special Topics in Management Sciences (1-3)

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.

497 Independent Study (1-9) 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.
498 Seminar in Management (1-6) 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.

## MARKETING

## R. Wahlers, Chairperson <br> 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, 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.

MAJOR IN APPAREL DESIGN (BA/BS), 73-76 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CHEM | 100 | People and Chemistry | 3 |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or |  | 3 |
|  | 201 | Elementary Microeconomics (3) | 3 |
| FCFA | 101 | Dimensions of Clothing | 3 |
|  | 102 | Fund of Apparel Construction | 3 |270275

202 ..... 3
Fit Intermed Apparel Construct
230 Textiles for Apparel ..... 3
265 ..... 3
Fashion Illustration
3
The Fashion Industry
3
Computer Fashion Presentation ..... 3
Draping ..... 3
Fashion Product Analysis ..... 3
Advanced Construction ..... 3
History of Costume ..... 3

|  | 365 | Fashion Forecasting | 3 |
| :--- | :--- | :--- | :---: |
|  | 369 | Fashion Apparel (1-6) | $3-6$ |
|  | 410 | Comp Apparel Prod Develop | 3 |
|  | 415 | Apparel Manufact and Wholesale | 3 |
|  | 480 | Studio Design | 3 |
|  | 481 | Fashion Promotion | 3 |
|  | 497 | Portfolio Dev for Fashion | 1 |
| FCS | 103 | FCS Body of Knowledge | 3 |
|  | 403 | FCS in Practice | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
| MKG | 300 | Principles of Marketing | 3 |

## MAJOR IN FASHION MERCHANDISING (BA/BS), 85 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| CHEM | 100 | People and Chemistry | 3 |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or |  |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
| FCFA | 101 | Dimensions of Clothing | 3 |
|  | 102 | Fund of Apparel Construction | 3 |
|  | 230 | Textiles for Apparel | 3 |
|  | 270 | The Fashion Industry | 3 |
|  | 275 | Computer Fashion Presentation | 3 |
|  | 280 | Merch Fundamentals and Math | 3 |
|  | 315 | Fashion Product Analysis | 3 |
|  | 345 | Visual Merchandising | 3 |
|  | 360 | History of Costume | 3 |
|  | 365 | Fashion Forecasting | 3 |
|  | 384 | Fashion Retail Manage Branding | 3 |
|  | 392 | Prof Develop for Fash Merch | 1 |
|  | 415 | Apparel Manufact and Wholesale | 3 |
|  | 475 | International Apparel Market | 3 |
|  | 481 | Fashion Promotion | 3 |
|  | 488 | Fashion Buy Merch Ecommerce | 3 |
| FCFM | 369 | Fashion Merchandising (3-6) | 3 |
| FCS | 103 | FCS Body of Knowledge | 3 |
|  | 403 | FCS in Practice | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
| Students completing this major must complete an entrepreneurial management or marketing minor. |  |  | . 18 |

## MAJOR IN MARKETING (BA/BS), 72 credits

Not open to professional selling majors.
PREFIX NO SHORT TITLE
CREDITS

Miller College of Business core, 45 credits
ACC 201 Principles of Accounting 1 3

202 Principles of Accounting 23
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
202 Elementary Macroeconomics 3
221 Business Statistics 3
FIN 300 Principles of Finance 3
ISOM 125 Micro Apps for Business 3
210 Business Information Systems 3
249 Foundations of Business Comm 3
351 Operations Management 3
MATH 132 Brief Calculus 3
MGT 300 Managing Behavior in Org 3
491 Bus Policy and Strategy Mgt 3
MKG 300 Principles of Marketing 3

45 crs
Core requirements, 12 credits
MKG 310 Consumer Behavior 3
325 Professional Selling 3
350 Marketing Res and Analytics 3
480 Marketing Strategy 3

12 crs
15 credits from
BUSA 300 Int Sustainability in Business (3)
MKG 330 Retail Management (3)
345 Procurement and Supply Mgt (3)
369 Professional Practice in Mkg (1-3)
375 Social Media Marketing (3)
400 Product Management (3)
410 Marketing Channels (3)
420 Integrated Mkg Communications (3)
425 Seminar in Adv Prof Selling (3)
427 Sales Management (3)
429 Sales Technology Application (3)
431 Retail Strategy (3)
432 Sales Strategy (3)
450 Advanced Mkg Res and Analytics (3)
460 Strategic Supply Chain Mgt (3)
470 International Marketing (3)
475 Marketing Simulation (3)
476 Executing Social Media Mkg (3)
495 Seminar in Marketing (3)
497 Independent Study in Marketing (1-3)
498 Advanced Immersive Project Mkg (3)
15
72 crs
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, 495, 497, and 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, 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 PROFESSIONAL SELLING (BA/BS), 72 credits

Not open to marketing majors.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| Miller College of Business core, 45 credits |  |  |  |
| ACC | 201 | Principles of Accounting 1 | 3 |
|  | 202 | Principles of Accounting 2 | 3 |
| BL | 260 | Principles of Business Law | 3 |
| ECON | 201 | Elementary Microeconomics | 3 |
|  | 202 | Elementary Macroeconomics | 3 |
|  | 221 | Business Statistics | 3 |
| FIN | 300 | Principles of Finance | 3 |
| ISOM | 125 | Micro Apps for Business | 3 |
|  | 210 | Business Information Systems | 3 |
|  | 249 | Foundations of Business Comm | 3 |
|  | 351 | Operations Management | 3 |
| MATH | 132 | Brief Calculus | 3 |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 491 | Bus Policy and Strategy Mgt | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  |  |  | 45 crs |
| Core requirements, 27 credits |  |  |  |
| MKG | 325 | Professional Selling | 3 |
|  | 350 | Marketing Res and Analytics | 3 |
|  | 425 | Seminar in Adv Prof Selling | 3 |
|  | 427 | Sales Management | 3 |
|  | 429 | Sales Technology Application | 3 |
|  |  |  | 15 crs |
| 3 credits from |  |  |  |
| MKG | 369 | Professional Practice in Mkg (1-3) |  |
|  | 432 | Sales Strategy (3) | 3 |
| 3 credits from |  |  |  |
| MKG | 345 | Procurement and Supply Mgt (3) |  |
|  | 460 | Strategic Supply Chain Mgt (3) | 3 |
| 6 credits from |  |  |  |
| MKG | 310 | Consumer Behavior (3) |  |

375 Social Media Marketing (3)
470 International Marketing (3)

72 crs
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.

## MINOR IN FASHION, 18 credits

## PREFIX NO SHORT TITLE

CREDITS

FCFA 101 Dimensions of Clothing 3
230 Textiles for Apparel 3
270 The Fashion Industry 3
365 Fashion Forecasting 3
6 credits from
FCFA 265 Fashion Illustration (3)
345 Visual Merchandising (3)
360 History of Costume (3)
481 Fashion Promotion (3)

18 crs
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 FCFA 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.

PREFIX NO SHORT TITLE CREDITS

| ECON | 116 | Survey of Economic Ideas (3) |  |
| :--- | :--- | :--- | :--- |
|  | or |  |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
| MKG | 300 | Principles of Marketing | 3 |

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

21 crs

## 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.

| ECON | 116 <br> or |  |
| :--- | :--- | :--- |
|  | 201 | Survey of Economic Ideas (3) |
| MKG | 300 | Principles of Marketing |
|  | 325 | Professional Selling |
|  | 427 | Sales Management |
|  | 429 | Sales Technology Application |
|  |  |  |
| 6 credits from |  |  |
| MKG | 369 | Professional Practice in Mkg (1-3) |
|  | 425 | Seminar in Adv Prof Selling (3) |
|  | 460 | Strategic Supply Chain Mgt (3) |
|  | 495 | Seminar in Marketing (3) |
|  | 497 | Independent Study in Marketing (1-3) |

6 credits from

Seminar in Adv Prof Selling (3)
trategic Supply Chain Mgt (3)
Independent Study in Marketing (1-3)

## CERTIFICATE IN SALES BOOT CAMP, 15 credits (See Certificates on page 21.)

## FAMILY AND CONSUMER SCIENCES: FASHION APPAREL (FCFA)

101 Dimensions of Clothing (3) Analysis of dress and adornment emphasizing dimensions that affect the design and end uses of textiles and clothing.

102 Fundamentals of Apparel Construction (3) Basic knowledge of garment construction, clothing selection, and art principles as applied to clothing.

## 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: FCFA 102.
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.
265 Fashion Illustration (3) Provides basic knowledge of drawing of the fashion figure and of fashion illustration.

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.
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: FCFA 102 for all majors; FCFA 265 for apparel design majors only.

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.
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: FCFA 202.
303 Draping (3) Provides basic knowledge of apparel design using the draping method.

Prerequisite: FCFA 202.
304 Grading and Marking for Apparel Design (3) Provide basic knowledge of product processes of grading and marking for apparel. Computer grading and marker generation will be emphasized.

Prerequisite: FCFA 300.
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.

Prerequisite: FCFA 101 and 102 and 230 and 270.
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: FCFA 101, 270.
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: FCFA 300 or 303.
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: FCFA 101 and 230 and 270.

365 Study of Fashion Forecasting (3) Provides an overview of the use of fashion forecasting to interpret trends for the fashion industry.

Prerequisite: FCFA 270.
369 Internship in Fashion Apparel Design (1-6) 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: FCFA 303; MKG 300; permission of the department chairperson.

A total of 6 credits may be earned.
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: FCFA 270 and 280.

## 392 Professional Development for Fashion Merchandising

(1) Provides knowledge and skills in preparing for merchandising and buying careers in the fashion industry.

Prerequisite: FCFA 270 and 280.

## 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 prototype development, and presentation using industry software. Another topic covered is grading.

Prerequisite: FCFA 275, and 300 or 303.
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: MKG 300 or MGT 342 and FCFA 102.
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: FCFA 230 and 270; and MKG 300 or MGT 342.

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: FCFA 300 and 303 and 350.

481 Fashion Promotion (3) Study of promotional strategies used by fashion retailers and manufacturers. Emphasis on application of promotional strategies.

Prerequisite: junior standing; FCFA 270; FCFA 480 for apparel design students.

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 to maintain an adequate profit level. Demonstrates mathematical and computer skills in buying and merchandising through the development of a buying plan.

Prerequisite: FCFA 384 and MGT 300; and MKG 300 or MGT 342.

Prerequisite or parallel: FCFA 415.
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: FCFA 415; FCFA 480 for apparel design students.

## FAMILY AND CONSUMER SCIENCES: FASHION MERCHANDISING (FCFM)

369 Internship in Fashion Merchandising (3-6) 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: FCFA 270 and 280 and 345 and 392; and MKG 300 or MGT 342; permission of the department chairperson.

A total of 6 credits may be earned.

## MARKETING (MKG)

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

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.
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.
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.
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.
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.
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.
369 Professional Practice in Marketing (1-3) 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.

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.
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.
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.
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.

## 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 videotaped 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.

427 Sales Management (3) Policies and practices in organizing, recruiting, selecting, training, compensating, motivating, and controlling the sales force.

Prerequisite: MKG 300, 325.
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.

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.
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.

450 Advanced Market Research and Analytics (3) Indepth 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 and BA 345 or permission of department chairperson.

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.
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, sociocultural, financial, and legal-political factors affecting international marketing.

Prerequisite: MKG 300.
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.
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.
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.

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.

497 Independent Study in Marketing (1-3) 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.

## 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.

# COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA 

R. Lavery, Dean; L. Byers, Associate Dean<br>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.

## COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA (CCIM)

210 Professional Development (1) Provides opportunities and skills needed to secure internships and jobs in communication- and media-related professions.

Open only to College of Communication, Information, and Media majors.

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.

## COMMUNICATION STUDIES

## G. Stamp, Chairperson <br> 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 and submit a senior portfolio.


## 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. 302).

## MAJOR IN COMMUNICATION STUDIES (BA/BS), 51 credits



|  | 412 | Rhetorical Thry and Criticism | 3 | COMM | 240 | Introduction to Human Comm | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 425 | Speechwriting | 3 |  | 320 | Persuasion | 3 |
|  | 450 | Rhetoric and Activism | 3 |  | 375 | Presentational Communication | 3 |
| Directed electives |  |  |  | 12 credits from electives in COMM other than |  |  |  |
| 9 credits from COMM other than COMM 210, 475 |  |  | 9 | COMM 210, 475 |  |  | 12 |
| 3 credits from |  |  |  |  |  |  | 21 crs |
| AHS | 264 | Film Analysis (3) |  | Not open to communication studies majors. |  |  |  |
| ANTH | 342 | Anth of the United States (3) |  |  |  |  |  |
| ENG | 213 | Intro to Digital Literacies (3) |  | MINOR IN MANAGEMENT AND ORGANIZATIONAL COMMUNICATION, 21 credits |  |  |  |
|  | 328 | Language and Gender (3) |  |  |  |  |  |
|  | 425 | Film Studies (3) |  |  |  |  |  |
|  | 435 | Issues in Rhet and Writing (3) |  | Open only to majors in communication studies (concentration |  |  |  |
| HSC <br> HIST | 180 | Principles of Community Health (3) |  | $1)$, or majors in human resource management, entrepreneurial |  |  |  |
|  | 240 | Introduction to Public History (3) |  | management, or business administration (concentration 2), or other majors with permission from chair of the Department of |  |  |  |
|  | 301 | The US and the Vietnam War (3) |  |  |  |  |  |
| PHIL | 200 | Symbolic Logic (3) |  | Communication Studies (concentration 3). Only 3 credits from a student's major may count in any concentration of the |  |  |  |
|  | 202 | Ethics (3) |  |  |  |  |  |
|  | 203 | Social Philosophy (3) |  | minor. |  |  |  |
| POLS | 475 | Minority Group Politics (3) |  |  |  |  |  |
| SOC | 221 | Intro Race and Ethnic Relat (3) |  | Concentration 1: For majors in communication studies, 21 credits |  |  |  |
|  | 235 | Sociology of Gender (3) |  |  |  |  |  |
|  | 242 | Social Problems (3) | 3 |  |  |  |  |
|  |  |  |  | PREFIX NO |  | SHORT TITLE | CREDITS |
|  |  |  | 51 crs |  |  |  |  |
|  |  |  |  | ECON | 116 | Survey of Economic Ideas (3) |  |
| MINOR IN CAMPAIGN COMMUNICATION, 24 credits |  |  |  |  | or |  |  |
|  |  |  |  |  | 201 | Elementary Microeconomics (3) | 3 |
|  |  |  |  | MGT | 241 | The Entrepreneurial Experience | 3 |
| PREFIX | NO | SHORT TITLE | CREDITS |  | $300$ | Managing Behavior in Org | 3 |
|  |  |  |  |  | $361$ | FDN of HR Employee Relations | 3 |
| COMM | 320 | Persuasion | 3 |  | 363 | Talent Management | 3 |
|  | 404 | Political Communication | 3 |  | 467 | Leadership and Change MGT | 3 |
|  | 412 | Rhetorical Thry and Criticism | 3 |  |  |  |  |
| JOUR | 101 | Media and Society | 3 | 3 credits from |  |  |  |
|  | 250 | Introduction to Advertising | 3 | COMM | 251 | Bus and Prof Comm (3) |  |
| POLS | 372 | Political Campaigns | 3 |  | 325 | Interviewing (3) |  |
|  | 375 | Media and Politics | 3 |  | 330 | Small Group Decision Making (3) |  |
|  |  |  |  |  | 340 | Leadership Communication (3) |  |
| 3 credits from |  |  |  |  | 351 | Organizational Communication (3) | 3 |
| COMM | 310 | Communication and Democracy (3) |  |  |  |  |  |
|  | 322 | Comm and Popular Culture (3) |  |  |  |  | 21 crs |
|  | 375 | Presentational Communication (3) |  |  |  |  |  |
|  | 385 | Rhet of Marginalized Voices (3) |  | Concentration 2: For majors in human resource |  |  |  |
|  | 425 | Speechwriting (3) |  | management, entrepreneurial management, or business |  |  |  |
|  | 479 | Practical Experience (1-3) |  | administration, 21 credits |  |  |  |
| JOUR | 261 | Principles of Public Relations (3) |  | COMM | 251 | Bus and Prof Comm | 3 |
| POLS | 370 | Pub Opinion and Pol Behavior (3) |  |  | 325 | Interviewing | 3 |
|  | 473 | American Political Parties (3) | 3 |  | 330 | Small Group Decision Making | 3 |
|  |  |  |  |  | 340 | Leadership Communication | 3 |
|  |  |  | 24 crs |  | 351 | Organizational Communication | 3 |
|  |  |  |  | ECON | 116 | Survey of Economic Ideas (3) |  |
| MINOR IN COMMUNICATION STUDIES, 21 credits |  |  |  |  | $\begin{aligned} & \text { or } \\ & 201 \end{aligned}$ |  |  |
|  |  |  |  |  |  | Elementary Microeconomics (3) | 3 |
| PREFIX | NO | SHORT TITLE CRL | CREDITS |  |  |  |  |


| 3 credits from |  |  |  |
| :---: | :---: | :---: | :---: |
| MGT | 241 | The Entrepreneurial Experience (3) |  |
|  | 300 | Managing Behavior in Org (3) |  |
|  | 361 | FDN of HR Employee Relations (3) |  |
|  | 363 | Talent Management (3) |  |
|  | 467 | Leadership and Change MGT (3) | 3 |
|  |  |  | 21 crs |
| Concentration 3: For other majors (requires permission of |  |  |  |
| Comm Studies chair), 21 credits |  |  |  |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | or |  |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
| 9 credits from |  |  |  |
| COMM | 251 | Bus and Prof Comm (3) |  |
|  | 325 | Interviewing (3) |  |
|  | 330 | Small Group Decision Making (3) |  |
|  | 340 | Leadership Communication (3) |  |
|  | 351 | Organizational Communication (3) | 9 |
| 9 credits from |  |  |  |
| MGT | 241 | The Entrepreneurial Experience (3) |  |
|  | 300 | Managing Behavior in Org (3) |  |
|  | 361 | FDN of HR Employee Relations (3) |  |
|  | 363 | Talent Management (3) |  |
|  | 467 | Leadership and Change MGT (3) | 9 |
|  |  |  | 21 crs |

## COMMUNICATION STUDIES (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.
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)

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.

240 Introduction to Human 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)

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.

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.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

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.
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.

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.

330 Small Group Decision Making (3) Focuses on the theories, concepts, and processes of small group decision making and problem solving.

## 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.

## 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.340 Leadership Communication (3) Introduces students to classic and contemporary leadership theories, with an emphasis on the central role of leadership communication.

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.

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.
369 Professional Experience (1-6) 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.
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.

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.
380 Practicum in Communication Studies (1-6) 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.

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.

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.
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.
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.

425 Speechwriting (3) Examines the process of effective speechwriting in a variety of contexts (i.e., corporate, political, nonprofit). Emphasizes key skills such as understanding audience and context, gathering information, and capturing the speaker's voice. Offers both a theoretical examination of the act of speechwriting and a pragmatic application of skills.

Prerequisite: COMM 210.
440 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. Introduces the approaches, variables, and topics that influence social interaction.

Prerequisite: COMM 360.

## 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.

## 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.
450 Rhetoric and Activism (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.

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.
465 Human Communication Inquiry (3) Introduces, reviews, and evaluates the various methods of research in the field of human communication from which the discipline's body of knowledge is derived.

Prerequisite: COMM 360.

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.

479 Practical Experience (1-3) 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 no more than 3 in any one semester or term.

Open only to communication studies majors and minors.
496 Directed Study in Communication Studies (1-3)
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.

## JOURNALISM

## J. Sparks, Chairperson

## bsu.edu/journalism

The Department of Journalism offers professional programs in advertising, journalism, graphics, magazine media, news, photo, 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 and Web site), Cardinal Communications (student-operated public relations agency), Adapt (student-operated advertising agency), Cardinal Metrics (a student-operated media research agency), and ballstatedaily.com (the unified 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 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 and an exit interview with the appropriate program coordinator. Before enrollment in JOUR 104 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 (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. Minors in journalistic storytelling and strategic communications are not open to students majoring in the journalism department.

## MAJOR IN ADVERTISING (BA/BS), 48-63 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| CCIM | 210 | Professional Development | 1 |
| JOUR | 101 | Media and Society | 3 |
|  | 103 | Introduction to Visual Comm | 3 |
|  | 104 | Strategic Writing | 3 |
|  | 250 | Introduction to Advertising | 3 |
|  | 275 | Media Law and Ethics | 3 |
|  | 285 | Account Management | 3 |
|  | 302 | Diversity and Media | 3 |
|  | 348 | Strat Comm Emerging Media | 3 |
|  | 352 | Media Planning 1 | 3 |
|  | 354 | Advertising Copy \& Layout 1 | 3 |
|  | 355 | Branding for AD and P R | 3 |
|  | 368 | Strategic Communication Des | 3 |
|  | 369 | Internship (0-12) | 2 |
| 382 | Media Theory and Research | 3 |  |
|  | 456 | Advertising Campaigns | 3 |

3 credits from

| JOUR | 405 | Strat Comm Case Studies (3) |
| :--- | :---: | :--- |
|  | 452 | Media Planning 2 (3) |
|  | 454 | Advertising Copy \& Layout 2 (3) |

Students majoring in advertising may add one or more optional concentration areas. If selecting multiple areas, no more than three credits may overlap.

| Advertising Sales, 15 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| MKG | 300 | Principles of Marketing | 3 |
|  | 325 | Professional Selling | 3 |
| TCOM | 340 | Electronic Media Sales | 3 |
|  | 344 | Electronic Media Promotion | 3 |
| 3 credits from |  |  |  |
| ECON | 116 | Survey of Economic Ideas (3) |  |
|  | 201 | Elementary Microeconomics (3) | 3 |
|  |  |  | 15 crs |
| Emerging Media, 12 credits |  |  |  |
| ICOM | 101 | The Digital World | 3 |
|  | 375 | Digital Storytelling | 3 |
| 6 credits from |  |  |  |
| ICOM | 201 | Web Design and Usability (3) |  |
|  | 210 | Introduction to Social Media (3) |  |
|  | 211 | Digital Interactivity Design (3) |  |
|  | 212 | Digital Image Design (3) |  |
|  | 213 | Digital Video Design (3) |  |
|  | 214 | Digital Sound Design (3) | 6 |
|  |  |  | 12 crs |
| Event Planning and Management, 12 credits |  |  |  |
| FCFN | 210 | Customer Service | 3 |
|  | 262 | Facilities Plan Layout and Des | 3 |
|  | 376 | Intro Event Management | 3 |
|  | 477 | Advanced Event Management | 3 |
|  |  |  | 12 crs |
| Journalistic Narrative Writing, 12 credits |  |  |  |
| JOUR | 280 | Writing for Magazines | 3 |
|  | 328 | Magazine Feature Writing | 3 |
|  | 380 | Long-form Digital Storytelling | 3 |
|  | 427 | Advanced Narrative Writing | 3 |
|  |  |  | 12 crs |
| Media Analytics, 9 credits |  |  |  |
| JOUR | 182 | Analytics and Content Strat | 3 |
|  | 282 | Media Analytics Metrics | 3 |
|  | 482 | Media Analytics in Practice | 3 |




3 credits from
JOUR 385
Writing Design Strategic Comm (3)
397 Immersion: Public Rel Project (3-9) 3
48 crs

Students majoring in public relations may add one or more optional concentration areas. If selecting multiple concentration areas, no more than three credits may overlap.

Advertising, 15 credits
JOUR 250 Introduction to Advertising
3
352 Media Planning 1
3
354 Advertising Copy \& Layout 1
3
485 Strat Comm Campaigns
3 credits from

| JOUR | 452 | Media Planning 2 (3) |
| :--- | ---: | :--- |
|  | 454 | Advertising Copy \& Layout 2 (3) |
|  |  |  |
| Emerging Media, 12 credits |  |  |
| ICOM | 101 | The Digital World |
|  | 375 | Digital Storytelling |
|  |  |  |
| 6 credits from |  |  |
| ICOM | 201 | Web Design and Usability (3) |
|  | 210 | Introduction to Social Media (3) |
|  | 211 | Digital Interactivity Design (3) |
| 212 | Digital Image Design (3) |  |
| 213 | Digital Video Design (3) |  |
| 214 | Digital Sound Design (3) |  |

$\frac{3}{15}$

6 credits from

210 Introduction to Social Media (3)
211 Digital Interactivity Design (3)
213 Digital Video Design (3)
214 Digital Sound Design (3)

Event Planning and Management, 12 credits
FCFN 210 Customer Service
3
262 Facilities Plan Layout and Des 3
376 Intro Event Management 3
477 Advanced Event Management 3
12 crs

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

12 crs

Media Analytics, 9 credits

| JOUR | 182 | Analytics and Content Strat | 3 |
| :---: | :---: | :---: | :---: |
|  | 282 | Media Analytics Metrics | 3 |
|  | 482 | Media Analytics in Practice | 3 |
|  |  |  | 9 crs |
| Media Presentation and Design, 15 credits |  |  |  |
| JOUR | 206 | Introduction to Digital Media | 3 |
|  | 234 | Design 1 | 3 |
|  | 241 | Design 2 | 3 |
|  | 242 | Programming Interactive Media | 3 |
|  | 323 | Magazine Design | 3 |
|  |  |  | 15 crs |
| Photojournalism, 12 credits |  |  |  |
| JOUR | 235 | Intro to Photojournalism | 3 |
|  | 236 | Photojournalism Lighting | 3 |
|  | 335 | Assignment Photojournalism | 3 |
| 3 credits from |  |  |  |
| JOUR | 332 | Photoj Managing and Editing (3) |  |
|  | 434 | Advanced Photoj Illustration (3) |  |
|  | 437 | Long-form Photojournalism (3) | 3 |
|  |  |  | 12 crs |
| Sport Marketing and Communication, 15 credits |  |  |  |
| SPTA | 190 | Introduction to Sport Admin | 3 |
|  | 303 | Sport Marketing | 3 |
|  | 345 | Sport Communication | 3 |
|  | 485 | Sport Management | 3 |
| 3 credits from |  |  |  |
| SPST | 250 | Special Topics in Sports (3) |  |
| SPTA | 300 | Sport Law (3) |  |
|  | 305 | Sport Finance (3) |  |
|  | 345 | Sport Communication (3) |  |
|  | 448 | Sport Governance (3) | 3 |
|  |  |  | 15 crs |
|  |  |  | 48-63 crs |
| MINOR IN DIGITAL MEDIA, 18 credits |  |  |  |
| PREFIX | NO | SHORT TITLE | CREDITS |
| ICOM | 101 | The Digital World | 3 |
|  | 375 | Digital Storytelling | 3 |
|  | 495 | Senior Capstone | 3 |
| 9 credits from |  |  |  |
| ICOM | 201 | Web Design and Usability (3) |  |
|  | 210 | Introduction to Social Media (3) |  |
|  | 211 | Digital Interactivity Design (3) |  |



## 4 to 5 credits from

| JOUR | 280 | Writing for Magazines (3) |  |
| :--- | :--- | :--- | :--- |
|  | 311 | News Feature Writing (2) |  |
|  | 312 | Opinion Writing (2) |  |
| NEWS | 322 | Sportswriting and Reporting (2) |  |
| TCOM | 324 | Specialty Reporting (2-6) |  |
|  | 326 | Press Videography (2) |  |
|  | 426 | News Producing (2) | $4-5$ |
|  |  |  | $20-21 \mathrm{crs}$ |

## MINOR IN SPORTS STUDIES, 16 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
| JOUR | 322 | Sportswriting and Reporting | 2 |
| NEWS | 418 | Specialty Reporting (2-6) | 2 |
| TCOM | 383 | Digital Sports Seminar | 3 |
|  |  |  |  |
| 9 credits from |  |  |  |
| HIST | 205 | Intro Sport in American Life (3) |  |
| PHIL | 304 | Philosophy of Sport (3) |  |
| SPST | 250 | Special Topics in Sports (3) |  |
| SPTA | 300 | Sport Law (3) |  |
|  | 305 | Sport Finance (3) |  |
|  | 345 | Sport Communication (3) | 9 |
|  | 448 | Sport Governance (3) | 16 crs |

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.

MINOR IN STRATEGIC COMMUNICATIONS, 15 credits

CREDITS
JOUR 101 Media and Society 3
103 Introduction to Visual Comm 3
104 Strategic Writing 3
250 Introduction to Advertising 3
261 Principles of Public Relations 3
15 crs

## 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 and Teachers College for the descriptions of these courses and other professional requirements of the teacher education program.

TEACHING MAJOR IN JOURNALISM (BA/BS), 79 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CCIM | 210 | Professional Development | 1 |
| EDSE | 320 | Read Div Sec Cont Class | 3 |
| JOUR | 101 | Media and Society | 3 |
|  | 103 | Introduction to Visual Comm | 3 |
|  | 234 | Design 1 | 3 |
|  | 235 | Intro to Photojournalism | 3 |
|  | 280 | Writing for Magazines | 3 |
|  | 320 | Media Art Dir Creative Process | 2 |
| NEWS | 105 | Journ Storytelling: Intro | 3 |
|  | 108 | Fndtns Great Storytellers | 1 |
|  | 109 | Fndtns Ethic Legal Principles | 1 |
|  | 120 | Newsgathering: Sourcing | 2 |
|  | 132 | Multimedia: Audio | 1 |
|  | 133 | Multimedia: Video | 1 |
|  | 215 | News Editing | 2 |
|  | 221 | Storytelling: Covering Issues | 3 |
|  | 397 | Immersion: Special Topics | 3 |
|  | 409 | Fndtns Ethical Legal Issues | 2 |
|  |  |  |  |
| 3 credits from |  |  |  |
| CCIM | 280 | Social Media (3) |  |
| JOUR | 242 | Programming Interactive Media (3) |  |
| NEWS | 233 | Specialized Story Form (3) | 3 |
|  |  |  | 43 crs |

## SENIOR HIGH, JUNIOR HIGH/ MIDDLE SCHOOL

 EDUCATION PROGRAM| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Professional education sequence, 36 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 150 | Basic Concepts of Secondary Ed | 3 |
|  | 380 | Princ of Tchng in Sec School | 3 |
| JOUR | 395 | Journ Teach and Advising Mthds | 3 |
| Student teaching | 12 |  |  |
|  |  | $\underline{36 ~ c r s}$ |  |
|  |  | 79 crs |  |

See Professional Education Assessment/Decision Points, p. 389, for additional information.

## LICENSE ADDITION IN JOURNALISM, 15 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| JOUR | 101 | Media and Society | 3 |
|  | 103 | Introduction to Visual Comm | 3 |
|  | 395 | Journ Teach and Advising Mthds | 3 |
| NEWS | 105 | Journ Storytelling: Intro | 3 |
|  | 449 | Legal and Ethical Issues | 3 |

15 crs

## CERTIFICATE IN JOURNALISTIC VISUAL PRESENTATION, 15 credits <br> (See Certificates on page 21.)

## ICOMMUNICATION (ICOM)

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.

Open to all students.
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 sites.

Open to all students.
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: ICOM 101 with a grade of $C$ (2.0) or better, or permission of the program director.

Open to all students.
211 Digital 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.

Open to all students.
212 Digital Image Design (3) Emphasizes aesthetic understanding and practical facility with digital content as effective visual communication. Emphasis on development of digital imaging competencies, techniques, and aesthetics.

Open to all students.
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 nonlinear editing.

Open to all students.
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.

Open to all students.
299X Experimental/Development Topics (3) Topics relevant to the discipline. Course titles to be announced before each semester.

Open to all students.
375 Digital Storytelling (3) Covers fundamentals of writing, formatting, digitizing, adapting, repurposing, and distributing digital media stories for application in information, communication, and entertainment industries.

Prerequisite: either ICOM 101 or two 200-level courses with a grade of $C(2.0)$ or better; prerequisite courses can be taken concurrently.

Open to all students.
390 Independent Studies in Digital Media (3) Academic or creative digital media project directed by a Ball State faculty member. Written proposal must be approved by the digital media minor program director prior to term of study.

Prerequisite: permission of the program director.
Open to all students.

495 Senior Capstone (3) Synthesis and culmination of undergraduate digital media design and production experiences in a group or individual capstone digital media design project.

Prerequisite: ICOM 375 with a grade of $C$ (2.0) or better for digital media minor students; permission of the program director for students enrolled in the digital media certificate.

Open to all students.
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.

## 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 101.

## 103 Introduction to Visual Communication and Web

 Development (3) Introduces students to the theories and concepts behind visual communication with the application and understanding of desktop publishing and the various ways that media practitioners use visuals. Students will apply these same theories and concepts in developing visual materials for the World Wide Web.Recommended parallel: JOUR 101.
Open only to journalism department majors, minors and those pursuing a major in business analytics.

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.

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.

206 (106) 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.
234 Design 1 (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.
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.
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.
241 Design 2 (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.
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 103 or 206.
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.
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.

## 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 104, 261, and successful completion of a departmental language usage proficiency exam.

Open only to students pursuing a major in advertising or public relations.

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 261.
Open only to majors in advertising, business analytics, and public relations.

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 and successful completion of a departmental language usage proficiency examination.

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.

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 261.

299X Experimental/Developmental Topics (1-12) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 12 credits may be earned.
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.
311 News Feature Writing (2) 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.
312 Opinion Writing (2) Researching and writing of columns, editorials, and reviews with emphasis on varied writing structures and styles.

Prerequisite: NEWS 221.

## 320 Media Art Direction and the Creative Process (2)

 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 234 or 354.
322 Sportswriting and Reporting (2) 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: JOUR 104 or NEWS 221 or SPTA 345.
323 Magazine Design (3) Designing for print and online magazines. Explores presentation strategies for news and feature content, and advertising for magazine formats. Computer-based production methods will be employed. Prerequisite: JOUR 234.

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.
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.

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.
345 Visual Reporting (3) Examination of the facets of informational graphics and the job of the modern-day graphics reporter. Experience gained in creating and researching explanatory charts, diagrams, maps, and graphics editing.

## Prerequisite: JOUR 234.

## 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 261 or TCOM 345.
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.
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, 104, and 250 for advertising majors; JOUR 103, 104, and 250 or 261 for business analytics majors; or TCOM 345 for telecommunications majors.

355 Branding for Advertising and Public Relations (3) Study of brands, branding, and the role of advertising and public relations in brand development. Explores how brands are built, leveraged, measured, and nurtured; the roles brands play in society; trends in brand development; and future of brands.

Prerequisite: JOUR 250 or JOUR 261 or TCOM 345.

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, 104, and 250 for advertising majors or JOUR 103, 104, and 261 for public relations majors.

369 Internship (0-12) 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.
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 longform 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.
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: JOUR 250 or JOUR 261 or TCOM 345.

## 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 368.
390 Honors Colloquium in Journalism (1-3) 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.

## 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.

## 397 Immersion: Public Relations Project (3-9)

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.
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 354 for advertising majors or JOUR 265 and 368 for public relations majors.

413 Advanced Newswriting and Reporting (2) Advanced writing, reporting, and editing skills, including multiplesource 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: NEWS 221.
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.
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.
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.
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.
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.
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, 352, 354 and 382.
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 of the methodologies learned previously. Emphasizes developing positive teamwork skills and portfolio and professional development including personal presentation skills.

Prerequisite: JOUR 265, 285, and 368.
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.

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.

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 intermediate-level courses. Emphasizes developing positive teamwork and leadership skills and includes opportunities to strengthen personal presentation proficiency.

Prerequisite: JOUR 265, 285, 352, 354, 368 and 382.
495 Individual Studies in Journalism (.5-12) 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.

496 Creative Project: Graphics (1-6) 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.

## 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.

## 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.

## 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.
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: 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.

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.

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.

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.

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.
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: successful completion of a departmental language usage proficiency exam; JOUR 101 and NEWS 105.

Open only to students majoring in journalism or telecommunications.

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, 133 and successful completion of a departmental language usage proficiency exam or permission of the journalism department chairperson.

Open only to students in a journalism department program and students in the telecommunications news concentration.

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.

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.
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.
340 Current Issues 2 (1) Exploration of current events, with an emphasis on their importance and context.

Prerequisite: NEWS 240.
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.
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.

## 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.
418 Specialty Reporting (2-6) 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.
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.

## SPORTS STUDIES (SPST)

250 (450) 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.

## TELECOMMUNICATIONS

## R. Brookey, Chairperson

## bsu.edu/tcom

The Department of Telecommunications (TCOM) offers programs and courses designed to prepare students for $21^{\text {st }}$ 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 ${ }^{\circledR}$ 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 preTCOM 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; all Telecommunications minors must earn credit in two semesters or the equivalent of one modern or classical language. 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.

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-A 16-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 $200-\mathrm{level}$ courses. All TCOM courses at the 300- and 400 -levels must be completed at Ball State University.

## MAJOR IN BUSINESS ANALYTICS (BA/BS), 42-66 credits

## (See Interdepartmental in the Miller College of Business for the telecommunications concentration in the Major in Business Analytics.)

## 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. Pretelecommunications 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.

PREFIX NO SHORT TITLE
CREDITS
News concentration, 47 credits



|  | 352 | Media Planning 1 (3) |  |
| :--- | :--- | :--- | :--- |
|  | 355 | Branding for AD and P R (3) |  |
| MKG | 300 | Principles of Marketing (3) |  |
|  | 310 | Consumer Behavior (3) |  |
|  | 320 | Advertising Management (3) |  |
|  | 325 | Professional Selling (3) |  |
|  | 420 | Integrated Mkg Communications (3) |  |
|  | 425 | Seminar in Adv Prof Selling (3) |  |
|  | 427 | Sales Management (3) |  |
| TCOM | 347 | Spec Tpes Sales and Promotion (3) | 6 |
|  |  |  |  | 45 crs

FCFN 477 requires FCFN 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.

## MINOR IN FILM/SCREENWRITING, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| ENG | 285 | Intro to Creative Writing | 3 |
|  | 310 | Screenwriting | 3 |
| TCOM | 363 | Film Genres | 3 |
|  | 360 | World Film History 1 (3) |  |
|  | or |  |  |
|  | 361 | World Film History 2 (3) | 3 |
| 3 credits from |  |  |  |
| ENG | 410 | Adv Screenwriting (3) |  |
|  | 425 | Film Studies (3) |  |
|  |  |  |  |
| 3 credits from |  |  |  |
| TCOM | 365 | Documentary Film History (3) |  |
|  | 465 | Film Theory Seminar (3) |  |
|  | 360 | World Film History 1 (3) |  |
|  | or |  | 3 |
|  | 361 | World Film History 2 (3) |  |
|  |  |  | 18 crs |

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 SPORTS STUDIES, 16 credits

## PREFIX NO SHORT TITLE

CREDITS

| JOUR | 322 | Sportswriting and Reporting | 2 |
| :--- | :--- | :--- | :--- |
| NEWS | 418 | Specialty Reporting (2-6) | 2 |
| TCOM | 383 | Digital Sports Seminar | 3 |

9 credits from
HIST 205 Intro Sport in American Life (3)
PHIL 304 Philosophy of Sport (3)
SPST 250 Special Topics in Sports (3)
SPTA 300 Sport Law (3)
305 Sport Finance (3)
345 Sport Communication (3)
448 Sport Governance (3)
16 crs

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.

## MINOR IN TELECOMMUNICATIONS, 24 credits

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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| TCOM | 101 | Foundations of TCOM | 3 |
|  | 204 | Media Analysis and Criticism | 3 |
|  | 284 | Practical Aspects of Media Law | 1 |
| 2 credits from |  |  |  |
| TCOM | 206 | Writing Elec Media Scriptwrtng | 1 |
|  | 207 | Writing Elec Media Copywriting | 1 |
| TCOM | 384 | Electronic Media Law | 3 |
|  | 408 | Med Ethics Soc Responsibility | 3 |
| 9 credits from TCOM electives |  |  | 9 |
|  |  |  | 24 crs |

## 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.

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 JOUR 101.
Open only to approved pre-telecommunications students, and business analytics majors with telecommunications concentration.

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.

## 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.

## 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.

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.

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.
299X Experimental/Developmental Topics (1-3) 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.

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.

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.

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.

324 News Videography (2) 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.

326 Presentation Techniques (2) 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.
330 Beginning Digital Audio Production (4) 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.

Open only to approved telecommunications majors and minors.

331 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.

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.

332 Beginning Digital Video Production (4) 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.

Prerequiste: 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.

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 330, 331, 332.

Open only to approved telecommunications majors and minors.

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 330, 331, 332.

Open only to approved telecommunications majors and minors.

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.

344 Electronic Media Promotion (3) Methods, concepts, strategies, and creation of efficient and effective targetoriented 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 and approved advertising majors.

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.

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.

## 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.

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 330 and 331 and 332.

Open only to approved telecommunications majors and minors.

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 330 and 331 and 332.

Open only to approved telecommunications majors and minors.

## 357 Special Topics in Film and Media Studies (3-6)

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.

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.

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 post1945 national cinema movements exemplified by NeoRealism and the French New Wave films.

Open only to approved telecommunications majors and minors and film/screenwriting minors.

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.

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.

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.

383 Digital Sports Seminar (3-6) A variable topic seminar focusing on issues pertaining to the business of digital sports. A total of 6 credits may be earned.
Open only to approved majors in telecommunications, journalism, sport administration, or sports studies.

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.

390 Independent Study (1-3) 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.

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.

391 Internship (1-6) 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.

397 Immersion: External Projects (1-6) 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, 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.

399 Practicum (1-3) 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.

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.

422 Advanced Video and Audio Reporting (2) Developing and crafting news packages on assignment and under deadline for a variety of electronic platforms. Emphasis on crafting engaging, people-centered scripts, purposeful standups, 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.

426 Electronic News Producing (2) 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.

433 Seminar in Digital Audio Production (3-9) 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 grade in each, and a 2.5 grade-point average for 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.

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.

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.

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 330 and 331 and 332.

Open only to approved telecommunications majors and minors.

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.

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; senior standing.

Open only to approved telecommunications majors and minors.

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; TCOM 330 and 331 and 332.

Open only to approved telecommunications majors and minors.

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.

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.

487 Seminar in Digital Video Production (3-6) 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.

497 Immersion: Internal Projects (1-6) Student-driven immersive experience utilizing telecommunications and directed by TCOM faculty. Tangible outcome or product is of benefit to campus, local, national, or international community.

Prerequisite: permission of instructor and department chairperson.

A total of 6 credits may be earned.

## 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.

## 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.

## 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.

## 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.
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: 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.

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.

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.

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.

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.
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: successful completion of a departmental language usage proficiency exam; JOUR 101 and NEWS 105.

Open only to students majoring in journalism or telecommunications.

## 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, 133 and successful completion of a departmental language usage proficiency exam or permission of the journalism department chairperson.

Open only to students in a journalism department program and students in the telecommunications news concentration.

233 Specialized Story Form Strategy (3) Development of multimedia reporting skills with an emphasis on the continuous update format and packaging stories for various platforms. Production of integrated news or feature stories for varied media.

Prerequisite: NEWS 105 and sophomore standing.
Open only to students in a journalism department program and students in the telecommunications news concentration.

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.
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.
340 Current Issues 2 (1) Exploration of current events, with an emphasis on their importance and context.

Prerequisite: NEWS 240.
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.
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.

## 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.
418 Specialty Reporting (2-6) 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.

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.

## SPORTS STUDIES (SPST)

250 (450) 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.

## COLLEGE OF FINE ARTS

R. Kvam, Dean; M. O'Hara, Associate Dean

## bsu.edu/cfa

The mission of the College of Fine Arts is to promote expertise in, awareness of, and appreciation for the fine arts among the students, the university community, and the public. Students and faculty members act as advocates for the arts in a variety of ways, ranging from education and performance to exhibition and consultation.

## 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.

498 Seminar in Museum Studies (1-5) 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.

## SCHOOL OF ART

## A. Flaten, Director <br> bsu.edu/art

The School of Art inspires and educates artists, designers, scholars and teachers. The School of Art offers four-year professional degree concentrations, the Bachelor of Fine Arts (BFA) degree, 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 major in art with a concentration in either art history or studio art. A minor in art history also is 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. A rich calendar of visiting artists, designers and scholars, as well as a full schedule of professional and student exhibitions in our Atrium Gallery, augment the curriculum. 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 program of study comprised of required courses in drawing, design, 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 work.
- Currently enrolled students who have not been admitted to the BFA degree program can take first-year foundation core courses as a BA studio art major beginning in the spring or summer terms. Currently enrolled BA students in studio art can later apply to the BFA degree program or elect to remain in the BA degree and complete the requirements for the studio art concentration.
- Students wanting to be considered for the BFA degree submit the art program application and portfolio of work upon completion of the foundation core (ADS 101, 102; AFA 101, 202) at the next scheduled review.

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 evaluation. Applications and portfolios for BFA degree program consideration can be submitted to meet the deadlines for first-time freshmen or currently enrolled students.

- Transfer students specializing in any program must complete the first-year foundation core courses (ADS 101, 102; AFA 101,202 ) before being admitted to areas of concentrations in the second year of study. For BFA students wanting a concentration in animation or visual communication, 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. In addition to submitting a portfolio for admission to the School of Art, 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; AFA 101,202) 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 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) - Students wanting to pursue this major concentration must undergo an additional review after successful completion of the foundation core (ADS 101, 102; AFA 101, 202). Review guidelines are revised periodically and made available through the School of Art.
- Visual Communication (BFA degree) - Students wanting to pursue this major concentration must undergo an additional review after successful completion of the foundation core (ADS 101, 102; AFA 101, 202). 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 in art history 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.

In accordance with the School of Art's selective admission process all studio courses (ACR, ADS, AFA, ART) are open only to art majors except by permission of the director of the school. Art History (AHS) courses are open to non-majors as are a small number of studio courses.

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), 49 credits

PREFIX NO SHORT TITLE CREDITS

Studio art concentration, 49 credits
ADS 101 Foundations 1

|  | 202 | Figure Drawing | 3 |
| :---: | :---: | :---: | :---: |
| AHS | 101 | History of Art Survey 1 | 3 |
|  | 102 | History of Art Survey 2 | 3 |
| ART | 100 | Art Orientation | 1 |
|  | 200 | Introduction to Computer Art | 3 |
| 3 credits from |  |  |  |
| ACR | 418 | Ceramics: Senior Project (3) |  |
|  | 428 | Metals: Senior Project (3) |  |
|  | 438 | Senior Project in Glass (3) |  |
| AFA | 487 | Senior Project in Drawing (3) |  |
|  | 489 | Senior Project in Painting (3) |  |
|  | 491 | Senior Project in Sculpture (3) |  |
|  | 493 | Senior Project in Printmaking (3) |  |
| ART | 480 | Senior Proj Photo Intermedia (3) | 3 |
| 12 credits from single area of emphasis as approved by the department. Areas include: ceramics, drawing, glass, metals, painting, photography, printmaking, or sculpture. |  |  | 12 |
| 6 credits from 200- and 300-level AHS courses |  |  | 6 |
| 6 credits from art studio electives |  |  | 6 |
|  |  |  | 49 cr |
| Art history concentration, 49 credits |  |  |  |
| ADS | 101 | Foundations 1 | 3 |
|  | 102 | Foundations 2 | 3 |
| AFA | 101 | Drawing 1 | 3 |
|  | 202 | Figure Drawing | 3 |
| AHS | 101 | History of Art Survey 1 | 3 |
|  | 102 | History of Art Survey 2 | 3 |
|  | 201 | Art Criticism and Meaning | 3 |
|  | 450 | Art Museum Theory and Practice | 3 |
|  | 480 | Art History Senior Thesis | 3 |
| ART | 100 | Art Orientation | 1 |
| 3 credits from |  |  |  |
| AHS | 290 | Asian Art (3) |  |
|  | 301 | Special Topics History of Art (3) |  |
| CC | 105 | Intro to the Classical World (3) |  |
|  | 304 | The Ancient City (3) | 3 |
| 3 credits from |  |  |  |
| AHS | 241 | Gothic Art (3) |  |
|  | 251 | Italian Renaissance Art (3) |  |
|  | 252 | Baroque and Rococo Art (3) |  |
|  | 253 | Neoclassicism and Romanticism (3) |  |
|  | 301 | Special Topics History of Art (3) | 3 |
| 3 credits from |  |  |  |
| AHS | 220 | Art in the United States (3) |  |
|  | 255 | Impressionism Post-Impression (3) |  |
|  | 261 | Modern Art (3) |  |

263 Contemporary Art (3)
264 Film Analysis (3)
275 History of Photography (3)
301 Special Topics History of Art (3)
311 History Three-Dimension Design (3)
6 credits from 200- and 300-level AHS courses
6
6 credits from art studio electives

49 crs
This program leads to a BA degree (see Academic Programs for degree outline).

MAJOR IN ART (BFA), 85 credits
AHS 101 satisfies the fine arts distribution requirement in the University Core Curriculum.

| PREFIX |  | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| Core requirements, 31 credits |  |  |  |
| ADS | 101 | Foundations 1 | 3 |
|  | 102 | Foundations 2 | 3 |
| AFA | 101 | Drawing 1 | 3 |
|  | 202 | Figure Drawing | 3 |
|  | 211 | Painting 1 | 3 |
| AHS | 101 | History of Art Survey 1 | 3 |
|  | 102 | History of Art Survey 2 | 3 |
| ART | 100 | Art Orientation | 1 |
|  | 200 | Introduction to Computer Art | 3 |
| 6 credits from 200- and 300-level AHS courses |  |  | 6 |
|  |  |  | 31 crs |
| Complete one professional concentration: Animation, 54 credits |  |  |  |
|  |  |  |  |
| ART | 210 | Introduction to 3D Animation | 3 |
|  | 211 | Traditional Animation | 3 |
|  | 310 | Drawing for Animation | 3 |
|  | 311 | 3D Modeling and Rendering | 3 |
|  | 312 | 3D Animation | 3 |
|  | 313 | Animation Specialty | 3 |
|  | 315 | Character Design | 3 |
|  | 316 | Storyboarding | 3 |
|  | 411 | Pre-Production | 3 |
|  | 414 | Animation Production | 3 |
|  | 490 | Senior Project in Animation | 3 |
| 3 credits from |  |  |  |
| ACR | 211 | Ceramics 1 (3) |  |
|  | 221 | Introduction to Metals (3) |  |
|  | 231 | Introduction to Glass (3) |  |

Core requirements, 31 credits102 Foundations 233
Figure Drawing3102 History of Art Survey 23
100 Art Orientation3

3 credits from
AHS 220 Art in the United States (3)
255 Impressionism Post-Impression (3)
261 Modern Art (3)


|  | 231 | Introduction to Glass | 3 |  | 361 | Relief Printmaking 1 (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 322 | Metalsmithing and Dieforming | 3 |  | 371 | Serigraphy 1 (3) | 3 |
|  | 323 | Metals: Casting | 3 |  |  |  |  |
|  | 324 | Metals: Color | 3 | 3 credits from |  |  |  |
|  | 425 | Metals: Advanced Fabrication | 3 | ACR | 211 | Ceramics 1 (3) |  |
|  | 426 | Metals: Adv Surface Techniques | 3 |  | 221 | Introduction to Metals (3) |  |
|  | 427 | Metals: New Technologies | 3 |  | 231 | Introduction to Glass (3) | 3 |
|  | 428 | Metals: Senior Project | 3 |  |  |  |  |
| AFA | 221 | Sculpture 1 | 3 | 12 credits from art studio electives |  |  | 12 |
|  | 231 | Introduction to Printmaking | 3 |  |  |  |  |
| ART | 301 | Advanced Computer Art | 3 |  |  |  | 85 |
| Select two courses from two different areas |  |  |  | Photography and intermedia arts, 54 credits |  |  |  |
| ACR | 233 | Kiln Sculpted Glass (3) |  |  |  |  | 3 |
|  | 312 | Ceramics: Throwing 1 (3) |  | ART | 231 | Photography 1 <br> Photography 2 | 3 |
|  | 313 | Ceramics: Hand Building 1 (3) |  |  | 232 | Photography 2 | 3 |
|  | 331 | Glass: Special Topics (3) |  |  | 233 | Digital Imaging | 3 |
|  | 332 | Intermediate Glass Blowing (3) |  |  | 321 | Video and Intermedia Art 1 | 3 |
| AFA | 322 | Sculpture 2 (3) |  |  | 322 330 | Video Art 2 | 3 |
|  | 323 | Sculpture Introduction Casting (3) |  |  | 330 332 | Color Photography | 3 |
|  | 324 | Sculpture: Wood (3) | 6 |  | 332 | Special Topics in Photography Senior Proj Photo Intermedia | 3 3 |
| 9 credits from art studio electives |  |  | 9 | AFA | 221 | Sculpture 1 | 3 |
|  |  |  |  |  | 231 | Introduction to Printmaking | 3 |
|  |  |  | 85 crs |  |  |  |  |
|  |  |  |  | 3 credits from |  |  |  |
| Painting, 54 credits |  |  |  | ART | 233 | Digital Imaging (3) |  |
| AFA | 217 | Watercolor 1 | 3 |  | 301 | Advanced Computer Art (3) | 3 |
|  | 221 | Sculpture 1 | 3 | 12 credits from art studio electives |  |  |  |
|  | 231 | Introduction to Printmaking | 3 |  |  |  | 12 |
|  | 313 | Painting: Concepts and Context | 3 |  |  |  |  |
|  | 314 | Painting: Materials Strategies | 3 | Comp | one | oncentration, 9 credits |  |
|  | 416 | Painting: Adv Studio Practice | 3 | Photog | hy a | d intermedia arts: concentration 1: |  |
|  | 417 | Independent Direct in Painting | 3 | Photog |  |  |  |
|  | 489 | Senior Project in Painting | 3 | ART | 331 | Studio Photography (3) |  |
| ART | 231 | Photography 1 | 3 |  | 433 | Directions in Photography (3) |  |
|  |  |  |  |  | 434 | Adv Directions in Photography (3) | 9 |
| 3 credits from |  |  |  |  |  |  |  |
| AFA | 312 | Figure Painting (3) |  | Photography and intermedia arts: concentration 2: |  |  |  |
|  | 315 | Narrative Painting (3) | 3 | Intermedia arts |  |  |  |
|  |  |  |  | AFA | 322 | Sculpture 2 (3) |  |
| 3 credits from |  |  |  | ART | 323 | Special Topics Intermedia Art (3) |  |
| AFA | 316 | Special Topics in Painting (3) |  |  | 424 | Directions in Intermedia Art (3) | 9 |
|  | 317 | Encaustics (3) | 3 |  |  |  |  |
|  |  |  |  |  |  |  | 85 crs |
| 3 credits from |  |  |  |  |  |  |  |
| AFA | 301 | Drawing: Point of View (3) |  | Printm | ing, 5 | credits |  |
|  | 302 | Drawing: Narrative Metaphor (3) |  | AFA | 217 | Watercolor 1 | 3 |
|  | 303 | Intermediate Figure Drawing (3) |  |  | 221 | Sculpture 1 | 3 |
|  | 304 | Experimental Figure Drawing (3) | 3 |  | 231 | Introduction to Printmaking | 3 |
|  |  |  |  |  | 341 | Intaglio Printmaking 1 | 3 |
| 3 credits from |  |  |  |  | 342 | Intaglio Printmaking 2 | 3 |
| AFA | 341 | Intaglio Printmaking 1 (3) |  |  | 351 | Lithography 1 | 3 |
|  | 351 | Lithography 1 (3) |  |  | 352 | Lithography 2 | 3 |
|  |  |  |  |  | 361 | Relief Printmaking 1 | 3 |


|  | 371 | Serigraphy 1 | 3 |
| :---: | :---: | :---: | :---: |
|  | 443 | Intaglio Printmaking 3 | 3 |
|  | 453 | Lithography 3 | 3 |
|  | 493 | Senior Project in Printmaking | 3 |
| 3 credits from |  |  |  |
| AFA | 301 | Drawing: Point of View (3) |  |
|  | 302 | Drawing: Narrative Metaphor (3) |  |
|  | 303 | Intermediate Figure Drawing (3) |  |
|  | 304 | Experimental Figure Drawing (3) | 3 |
| 3 credits from |  |  |  |
| ACR | 211 | Ceramics 1 (3) |  |
|  | 221 | Introduction to Metals (3) |  |
|  | 231 | Introduction to Glass (3) | 3 |
| 12 credits from art studio electives |  |  | 12 |
|  |  |  | 85 crs |
| Sculpture, 54 credits |  |  |  |
| ACR | 211 | Ceramics 1 | 3 |
|  | 221 | Introduction to Metals | 3 |
|  | 231 | Introduction to Glass | 3 |
| AFA | 221 | Sculpture 1 | 3 |
|  | 231 | Introduction to Printmaking | 3 |
|  | 322 | Sculpture 2 | 3 |
|  | 323 | Sculpture Introduction Casting | 3 |
|  | 324 | Sculpture: Wood | 3 |
|  | 325 | Sculpture Cast and Mold Making | 3 |
|  | 426 | Sculpture: Advanced Problems | 3 |
|  | 491 | Senior Project in Sculpture | 3 |
| ART | 231 | Photography 1 | 3 |
| 3 credits from |  |  |  |
| ART | 301 | Advanced Computer Art (3) |  |
|  | 321 | Video and Intermedia Art 1 (3) | 3 |
| Select two courses from two different areas |  |  |  |
| ACR | 233 | Kiln Sculpted Glass (3) |  |
|  | 312 | Ceramics: Throwing 1 (3) |  |
|  | 313 | Ceramics: Hand Building 1 (3) |  |
|  | 322 | Metalsmithing and Dieforming (3) |  |
|  | 323 | Metals: Casting (3) |  |
|  | 324 | Metals: Color (3) |  |
|  | 331 | Glass: Special Topics (3) |  |
|  | 332 | Intermediate Glass Blowing (3) | 6 |
| 9 credits from art studio electives |  |  | 9 |
|  |  |  | 85 crs |
| Visual communication, 54 credits |  |  |  |
| ADS | 241 | Intro to Visual Communication | 3 |

443 Intaglio Printmaking 3
453 Lithography 3
493 Senior Project in Printmaking
3 credits from
302 Drawing: Narrative Metaphor (3)
303 Intermediate Figure Drawing (3)
304 Experimental Figure Drawing (3)

85 crs

221 Introduction to Metals
231 Introduction to Glass

231 Introduction to Printmaking
323 Sculpture Introduction Casting
324 Sculpture: Wood
426 Sculpture: Advanced Problems 3
491 Senior Project in Sculpture

|  | 242 | Type and Image | 3 |
| :---: | :---: | :---: | :---: |
|  | 341 | Visual Communication 1 | 3 |
|  | 342 | Visual Communication 2 | 3 |
|  | 441 | Visual Communication 3 | 3 |
|  | 442 | Visual Communication 4 | 3 |
|  | 443 | Sp Topics Visual Communication (3-9) | 3 |
| AFA | 231 | Introduction to Printmaking | 3 |
| AHS | 310 | History Visual Communication | 3 |
| ART | 231 | Photography 1 | 3 |
| 6 credits from |  |  |  |
| ADS | 301 | Visual Communication Tech 1 (3) |  |
|  | 302 | Visual Communication Tech 2 (3) |  |
| ART | 233 | Digital Imaging (3) |  |
|  | 301 | Advanced Computer Art (3) |  |
|  | 321 | Video and Intermedia Art 1 (3) | 6 |
| 3 credits from |  |  |  |
| ADS | 471 | Visual Communication Practicum (3) |  |
|  | 480 | Senior Design Thesis (3) |  |
| ART | 369 | Department of Art Internship (3) | 3 |
| 3 credits from |  |  |  |
| AFA | 341 | Intaglio Printmaking 1 (3) |  |
|  | 351 | Lithography 1 (3) |  |
|  | 361 | Relief Printmaking 1 (3) |  |
|  | 371 | Serigraphy 1 (3) | 3 |
| 3 credits from |  |  |  |
| ACR | 211 | Ceramics 1 (3) |  |
|  | 221 | Introduction to Metals (3) |  |
|  | 231 | Introduction to Glass (3) |  |
| AFA | 221 | Sculpture 1 (3) | 3 |
| 9 credits from art studio electives |  |  | 9 |

## MAJOR IN GRAPHIC ARTS MANAGEMENT (BA/BS), 82 credits

Students preparing for management positions in the graphic arts industry will complete a departmental major in graphic arts management and a minor in business administration. A required internship gives students experience in the graphic arts industry. Plans for internship credit are arranged with assistance and approval of the program coordinator and internship coordinator, who also supervises the internships.

PREFIX NO SHORT TITLE
CREDITS
Required technical courses
TGRA 180 Introduction to Graphic Comm 3
181 Print Imaging Systems 3

|  | 182 | Digital Imaging 1 | 3 |
| :---: | :---: | :---: | :---: |
|  | 183 | Screen and Specialty Graphics | 3 |
|  | 281 | Ink and Substrate | 3 |
|  | 283 | Packaging Technology | 3 |
|  | 285 | Digital Imaging 2 | 3 |
|  | 286 | Digital Photography 1 | 3 |
|  | 381 | Color Management | 3 |
|  | 385 | Cross Media Communications | 3 |
|  | 386 | Planning and Finishing | 3 |
|  | 387 | Digital Photography 2 |  |
| Required management courses |  |  |  |
| TDPT | 380 | Internship in Technology | 3 |
|  | 390 | Training and Devel in Industry | 3 |
| TGRA | 480 | Capstone in Graphic Comm | 3 |
|  | 484 | Practicum in Graphic Comm |  |
|  | 486 | Advanced Management Systems | 3 |
|  | 488 | Cost Analysis | 3 |
|  | 489 | Quality Control and Automation | 3 |
| Required Business Administration minor |  |  | 18 |
| CHEM | 111 | General Chemistry 1 | 4 |
| ECON | 201 | Elementary Microeconomics | 3 |

## MINOR IN ART HISTORY, 24 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.

| PREFIX NO |  | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| ADS | 101 | Foundations 1 | 3 |
|  | 102 | Foundations 2 | 3 |
| AHS | 101 | History of Art Survey 1 | 3 |
|  | 102 | History of Art Survey 2 | 3 |
| 12 credits from 200- and 300 -level AHS courses (no more than 3 credits of independent study) |  |  | - 12 |

## MINOR IN BUSINESS ADMINISTRATION, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 361 | FDN of HR Employee Relations | 3 |
| MKG | 300 | Principles of Marketing | 3 |
|  | 310 | Consumer Behavior | 3 |

6 credits from the following concentrations (choose 2): Accounting

| ACC | 201 | Principles of Accounting 1 (3) |
| :--- | :--- | :--- |
| Marketing |  |  |
| MKG | 320 | Advertising Management (3) |
|  | 325 | Professional Selling (3) |
|  | 400 | Product Management (3) |
|  | 460 | Strategic Supply Chain Mgt (3) |
|  |  |  |
| Management |  |  |
| MGT | 241 |  |
|  | 363 | The Entrepreneurial Experience (3) |
|  |  |  | Talent Management (3)

Information Systems and Operations Management
ISOM 125 Micro Apps for Business (3)
18 crs
MGT 300 requires 45 completed credits; $C$ or better in ECON 116 or 201. MKG 300 requires sophomore standing and a minimum grade of $C$ in ECON 116 or 201.

MINOR IN DIGITAL PUBLISHING, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :--- | :---: |
|  |  |  |  |
| TGRA | 180 | Introduction to Graphic Comm | 3 |
|  | 182 | Digital Imaging 1 | 3 |
|  | 283 | Packaging Technology | 3 |
|  | 285 | Digital Imaging 2 | 3 |
|  | 381 | Color Management | 3 |
|  | 385 | Cross Media Communications | 3 |
|  |  | 18 crs |  |

## MINOR IN GRAPHIC ARTS TECHNOLOGY, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| TGRA | 180 | Introduction to Graphic Comm | 3 |
|  | 181 | Print Imaging Systems | 3 |
|  | 182 | Digital Imaging 1 | 3 |
|  | 183 | Screen and Specialty Graphics | 3 |
| 184 | Comp Applications-Graphic Arts | 3 |  |
|  | 381 | Color Management (3) |  |
|  | or |  |  |
|  | 386 | Planning and Finishing (3) | 3 |

18 crs

## 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 and Teachers College for the descriptions of these courses and
other professional requirements of the teacher education program.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| ADS | 101 | Foundations 1 | 3 |
|  | 102 | Foundations 2 | 3 |
| AED | 201 | Introduction to Art Education | 3 |
|  | 304 | Art Curriculum and Instruction | 3 |
|  | 305 | Art Teach and Learn Practicum | 3 |
|  | 399 | Classrm Methods Materials: Art | 3 |
| AFA | 101 | Drawing 1 | 3 |
|  | 202 | Figure Drawing | 3 |
| AHS | 101 | History of Art Survey 1 | 3 |
|  | 102 | History of Art Survey 2 | 3 |
|  | 201 | Art Criticism and Meaning | 3 |
| ART | 100 | Art Orientation | 1 |
|  | 200 | Introduction to Computer Art | 3 |
| 3 credits from 200- and 300-level AHS courses |  |  | 3 |
| 12 credits from |  |  |  |
| ACR | 211 | Ceramics 1 (3) |  |
|  | 221 | Introduction to Metals (3) |  |
|  | 231 | Introduction to Glass (3) |  |
|  | 233 | Kiln Sculpted Glass (3) |  |
| AFA | 211 | Painting 1 (3) |  |
|  | 217 | Watercolor 1 (3) |  |
|  | 221 | Sculpture 1 (3) |  |
|  | 231 | Introduction to Printmaking (3) |  |
| ART | 231 | Photography 1 (3) |  |
|  | 321 | Video and Intermedia Art 1 (3) | 12 |

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)

## ALL-GRADE EDUCATION PROGRAM

## PREFIX NO SHORT TITLE <br> CREDITS

| Professional education sequence, 36 credits |  |  |  |
| :--- | :--- | :--- | :--- |
| EDAL | 470 | Student Teaching: All-Grade (6-7) | 7 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 150 | Basic Concepts of Secondary Ed | 3 |
|  | 320 | Read Div Sec Cont Class | 3 |

380 Princ of Tchng in Sec School 3
465 Elective Student Teaching (3 or 5)

See Professional Education Assessment/Decision Points, p. 389 , for additional information.

## ART: CRAFTS (ACR)

211 Ceramics 1 (3) Basic hand-building techniques: wedging, slab, coiling, and pinch methods. Glazes, slips, bisquing, and firing will be part of the studio experience.

Prerequisite: ADS 102 or CAP 102; AFA 202.
221 Introduction to Metals (3) Introduction to jewelry and object making using metal. Emphasis on design and the techniques of sawing, soldering, forming, bezel setting, chain and wire working, as well as other basic processes.

Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to art majors.
231 Introduction to Glass (3) Introduction to studio glass, history and practice. Emphasis on beginning techniques of blown glass, fused glass, and cold working processes.

Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to art majors.
233 Kiln Sculpted Glass (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 102 or CAP 102; AFA 202.
Open only to art majors.
300 Craft Workshop (1-3) 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 art majors.
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 art majors.
313 Ceramics: Hand Building 1 (3) Continued study of hand building methods as well as form, idea, and glazing techniques.

Prerequisite: ACR 211.

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.
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.
316 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 art majors.

322 Metalsmithing and Dieforming (3) Introduction to metalsmithing including raising and dieforming; basic hammering and forming techniques will be covered.

Prerequisite: ACR 221.
Open only to art majors.
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 art majors.
324 Metals: Color (3) Color in metal, including enameling and aluminum and refractory metal anodizing.

Prerequisite: ACR 221.
Open only to art majors.
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 art majors.
332 Intermediate Glass Blowing (3) Intermediate techniques of blown glass and cold glass fabrication, and introduction to studio equipment maintenance.

Prerequisite: ACR 231.
Open only to art majors.
333 Intermediate Glass Casting (3) Intermediate glass casting and kiln forming.

Prerequisite: ACR 233.
Open only to art majors.
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 art majors.
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 art majors.

369 Craft Internship (1-3) 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.
415 Independent Study in Crafts (1-3) 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 the director of the school.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.
417 Ceramics: Hand Building 3 (3) Continued study of hand building techniques, form, and idea based on individual student needs.

Prerequisite: ACR 315.
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.
425 Metals: Advanced Fabrication (3) Advanced construction techniques including catches, hinges, stone settings, etc. Basic forging will also be covered.

Prerequisite: ACR 323.
426 Metals: Advanced Surface Techniques (3) Advanced surface techniques including chasing and repoussé, metal inlays and laminations, patination, and other surface embellishments.

Prerequisite: ACR 324.

427 Metals: New Technologies (3) New technologies in metalsmithing. Extended study of contemporary technologies such as electroforming, plastics, and photoetching.

Prerequisite: ACR 425.
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.
436 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.
437 Professional Practices in Glass (3) Focuses on portfolio preparation, job opportunities, residencies, galleries, contracts, and commissions.

Prerequisite: ACR 332, 333, or 334.
Open only to art majors.
438 Senior Project in Glass (3) Synthesis and culmination of studio experiences in glass culminating in an exhibition of work. Documentation of work, resume, and artist statement.

Prerequisite: ACR 436, 24 credits in glass; sponsorship by the glass faculty; permission of the director of the school.

Open only to art majors.
498 Seminar in Crafts (3-9) 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.

## ART: DESIGN (ADS)

101 Foundations 1 (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.

Parallel recommended: AFA 101.
Open only to art majors.
102 Foundations 2 (3) Continued exploration and application of basic art principles and elements to organize three-dimensional space. Also employs basic media, techniques, and tools with emphasis on artisanship.

Prerequisite: ADS 101 or CAP 101.

Parallel recommended: AFA 202.

## 241 Introduction to Visual Communication (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.
242 Type and Image (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.
300 Design Workshop (1-3) 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.
301 Visual Communication Technologies 1 (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.
302 Visual Communication Technologies 2 (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.
341 Visual Communication 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.
342 Visual Communication 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.

415 Independent Study in Design (1-3) 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.

441 Visual Communication 3 (3) Advanced problem solving in sequential and three-dimensional forms.

Prerequisite: ADS 342.
Open only to visual communication majors.
442 Visual Communication 4 (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.

## 443 Special Topics in Visual Communication (3-9)

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.
471 Visual Communication 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.
480 Senior Design 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.
498 Seminar in Design (3-9) 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.

## ART: EDUCATION (AED)

201 Introduction to Art Education (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 102 or CAP 102; AFA 202.
Open only to art majors.
303 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.

304 Art Curriculum and Instruction (3) Curriculum content, planning, teaching strategies, assessment in art education by developing a thematically based unit of art education lessons.

Prerequisite: ADS 102 or CAP 102; AFA 202; AHS 101, 102; $C$ or better grade in AED 201; admission to the Teachers College.

Open only to art majors.
305 Art Teaching and Learning Practicum (3) Direct experience in planning, implementing, and evaluating art education teaching strategies with elementary-age students, including classroom management, budgets, and media decisions. Developed from a self-created unit. Laboratory teaching time is arranged.

Prerequisite: C or better grade in AED 304.
Open only to art majors.
399 Classroom Use of Methods and Materials: Art (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.
Open only to art majors.
415 Independent Study in Art Education (1-3) 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.
498 Seminar in Art Education (1-9) 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.

## ART: FINE ARTS (AFA)

101 Drawing 1 (3) Introduction to drawing, the application of basic principles and elements of art as they relate to drawing concepts. Emphasizes development of perceptual awareness and familiarity with a broad range of media and techniques. Core Transfer Library: Fine Arts (IFA 1320)

Parallel recommended: ADS 101.
Open only to art majors.
202 Figure Drawing (3) Life drawing. Intensive study of the human figure. Descriptive, expressive, and interpretive methods of imaging the figure are explored, and a variety of materials and techniques are introduced.

Prerequisite: AFA 101 or CAP 161 and 162.
Parallel: ADS 102 or CAP 102.
Open only to art majors.
211 Painting 1 (3) Introduction to painting: study of basic considerations of image making with oil paint. Focuses on media, techniques, design elements, and concepts.

Prerequisite: ADS 102 or CAP 102; AFA 202.
217 Watercolor 1 (3) Introduction to materials and techniques of transparent watercolor as they apply to the solution of painting problems.

Prerequisite: ADS 102 or CAP 102; AFA 202.
221 Sculpture 1 (3) Introduction to traditional and contemporary sculpture. The materials associated with additive, subtractive, and substitution techniques will be demonstrated.

Prerequisite: ADS 102 or CAP 102; AFA 202.
231 Introduction to Printmaking (3) Beginning printmaking techniques with an emphasis on intaglio and relief processes.

Prerequisite: ADS 102 or CAP 102; AFA 202.
300 Studio Workshop (1-3) 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 art majors.
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 art majors.

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 nonvisual 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 art majors.
303 Intermediate Figure Drawing (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 art majors.
304 Experimental Figure Drawing (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 art majors.
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 art majors.

312 Figure Painting (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.
Open only to art majors.
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 art majors.
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 art majors.
315 Narrative Painting (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 art majors.
316 Special Topics in Painting (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 art majors.
317 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 art majors.
322 Sculpture 2 (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 art majors.
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.
324 Sculpture: Wood (3) Introduction to wood fabrication, shaping, and finishing as it applies to functional and nonfunctional objects.

Prerequisite: AFA 221.
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.
341 Intaglio Printmaking 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 art majors.
342 Intaglio Printmaking 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.
351 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 art majors.
352 Lithography 2 (3) Further development and investigation of the processes of lithography, including color. Exploration of stone and metal plate techniques.

Prerequisite: AFA 351.
361 Relief Printmaking 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 art majors.
362 Relief Printmaking 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 art majors.
371 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 art majors.
372 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 art majors.
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 art majors.

405 Advanced Topics in Drawing (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: 6 credits from AFA 301 or 302 or 303 or 304.

Open only to art majors.
406 Independent Directions in Drawing (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.
415 Independent Study in Fine Arts (1-3) 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.

## 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.
417 Independent Directions in Painting (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.
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.
443 Intaglio Printmaking 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.
444 Intaglio Printmaking 4 (3) Application of the technical and aesthetic aspects of advanced intaglio printmaking emphasizing individualized instruction and problem solving.

Prerequisite: AFA 443.
Open only to art majors.

453 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.
Open only to art majors.
454 Lithography 4 (3) Emphasizes color printing. More fully develops skills as an artist and as a printer in the lithographic medium.

Prerequisite: AFA 453.
Open only to art majors.
487 Senior Project in Drawing (3) Synthesis and culmination of undergraduate studio experiences in drawing, with a student exhibition as the concluding effort.

Prerequisite: 18 credits in drawing, sponsorship by an art faculty member; permission of the director of the school.

489 Senior Project in Painting (3) Synthesis and culmination of undergraduate studio experiences in painting, with a student exhibition and supporting written composition as the concluding effort.

Prerequisite: AFA 416, 18 credits in painting; sponsorship by an art faculty member; permission of the director of the school.

491 Senior Project in Sculpture (3) Synthesis and culmination of undergraduate studio experiences in sculpture, with a student exhibition as the concluding effort.

Prerequisite: 21 credits in sculpture, sponsorship by a sculpture faculty member; permission of the director of the school.

493 Senior Project in Printmaking (3) Synthesis and culmination of undergraduate studio experience in printmaking, with a student exhibition as the concluding effort.

Prerequisite: 27 credits in printmaking, sponsorship by a printmaking faculty member, and permission of the director of the school.

498 Seminar in Fine Arts (3-9) Individual investigation and experience in the fine arts.

Prerequisite: completion of 30 credits in art; permission of the director of the school.

A total of 9 credits may be earned.

## 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.

101 History of Art Survey 1 (3) Introduction to art and architecture as social products of a global human history. Both the similarity and diversity of human social organizations and the role of visual culture in time will be discussed. Prehistoric, tribal, Asian, Ancient and European to the end of the Middle Ages. Core Transfer Library: Fine Arts (IFA 1311)

Open only to art majors and art history minors.
102 History of Art Survey 2 (3) Continuation of history of art survey sequence. Western art from the fifteenth century to the present. Core Transfer Library: Fine Arts (IFA 1312)

Prerequisite: AHS 101.
Open only to art majors and art history minors.
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.
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 102.
Open only to art majors.
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.
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.
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.
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 freemarket capital.

Prerequisite: AHS 100 or 102 or permission of the instructor.

Open to all students.
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.

## 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.
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.
Open to all students.
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.
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.
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.
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.
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.

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.

## 302 Special Topics in History of Art: Ancient or Non-

 Western (3) Investigation of a particular topic, theme, or issue in ancient or non-western 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.

## 303 Special Topics in History of Art: Post-Classical

 Europe to 1850 (3) Investigation of a particular topic, theme, or issue in art history from post-classical Europe to 1850. 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.

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.

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.

## 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.
415 Independent Study in Art History (1-3) 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.

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.
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.
498 Seminar in Art History (3-9) Advanced class
investigation in the history of the visual arts.
Prerequisite: completion of 30 credits in art or permission of the director of the school.

A total of 9 credits may be earned.

## ART (ART)

100 Art Orientation (1) Introduces departmental, collegiate, and university courses, programs, practices, and policies.

Explores majors, facilities, safety procedures, careers, and services available that concern art majors.

Open only to art majors.
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 art majors.
210 Introduction to 3D Animation (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 102 or CAP 102; AFA 202.
Parallel: ART 211.
Open only to animation majors.
211 Traditional Animation (3) Introduces classic animation principles, experimentation, observation, professional practices, and project refinement.

Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to animation majors.
231 Photography 1 (3) Introduction to photography as an expressive art form emphasizing the development of photographic vision as well as technical proficiency. Students furnish their own light meters and cameras with adjustable aperture, time setting, and focusing.

Prerequisite: ADS 102 or CAP 102; AFA 202.
Open only to art majors.
232 Photography 2 (3) Emphasizes the further exploration of fine art photography, technical and aesthetic concerns of photographic image making, and an introduction to contemporary photographic history, theories, and issues.

Prerequisite: ART 231.
Open only to art majors.
233 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, 231.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

Open only to art majors.
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.

## 291 Basic Photography and Intermedia Art Techniques

(3) Introductory art-making course for non-art majors. Students learn a range of basic fine art photography and intermedia techniques using digital methods including but not limited to the use of consumer and professional digital cameras, scanners, and software to produce still and moving media art projects in a studio art environment.

Open only to non-art majors.
299X Experimental/Developmental Topics (0-6) Topics relevant to the discipline. Course titles to be announced before each semester.

A total of 6 credits may be earned.
300 Art Workshop (1-3) 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 art majors.
301 Advanced Computer Art (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 art majors.
310 Drawing for Animation (3) Introduces volume and 2axis 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.
311 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.
Parallel: ART 310.

Open only to animation majors.

## 312 3D Animation, Rigging, and Simulation (3)

Intermediate study of 3D computer animation. Topics will include animation, rigging, and simulation.

Prerequisite: ART 311.
Parallel: ART 315.
Open only to animation majors.
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.
Parallel: ART 316.
Open only to animation majors.
315 Character Design (3) Focuses on visual character development from descriptions, scripts, reference, or biographies. Includes research, observation, experimentation, and construction.

Prerequisite: ART 310.
Parallel: ART 312.
Open only to animation majors.
316 Storyboarding (3) Explores large-scale narrative, entertainment, and explanation as a way to eliminate interior ideas, and logistics problems in storyboarding.

Prerequisite: ART 315.
Parallel: ART 313.
Open only to animation majors.
321 Video and Intermedia Art 1 (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, preproduction, and digital editing techniques.

Prerequisite: ADS 102 or CAP 102; AFA 202; ART 200.

Open only to art majors.
322 Video and Intermedia Art 2 (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 art majors.
323 Special Topics in Intermedia Art (3) Emphasizes the exploration 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 art majors.
330 Color Photography (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 art majors.
331 Studio Photography (3) Emphasizes the creative potential of medium and large format photography as well as introducing artistic manipulation of lighting equipment in the studio and on location. Professional applications will also be addressed.

Prerequisite: ART 232.
Open only to art majors.
332 Special Topics in Photography (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 art majors.
369 Department 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.
370 Art Immersive Project (1-6) 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.

411 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.
Parallel: ART 414.
Open only to animation majors.

413 Special Topics in Animation (3-9) 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.
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 313.
Parallel: ART 411.
Open only to animation majors.
415 Independent Study in Art (1-3) 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.
416 Animation Apprentice (1-3) 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.
424 Directions in Intermedia Art (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.
433 Directions in Photography (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.
434 Advanced Directions in Photography (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.
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.
490 Senior Project in Animation (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.
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.

## TECHNOLOGY: GRAPHIC ARTS MANAGEMENT (TGRA)

180 Introduction to Graphic Communications (3)
Introduction to graphic communications through the history of printing, conventional, and digital reproduction of prepress, press, and post press processes. Career opportunities will also be explored.

181 Print Imaging Systems (3) Explores print imaging 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/conversions, plates and platemaking, inks, substrates, presswork and finishing operations associated with these printing processes.

182 Digital Imaging 1 (3) Emphasizes the theoretical and practical applications of digital imaging technologies including Adobe Illustrator and Adobe Photoshop. Study 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.
183 Screen and Specialty Graphics (3) Study of screen and other specialty graphics operations and its relationship to various substrate materials. Includes screen printing, pad printing, 3D printing, and vinyl cutting. A focus is placed on artwork preparation, image generation/conversion, production techniques, equipment requirements and usage, and capabilities in the area of screen and specialty graphics.

## 184 Computer Applications in Graphic Arts (3) Computer

 applications for design and graphic communication are examined and applied. Applications include: Windows and Macintosh operating systems, image illustration and manipulation, page layout, Web site, and other graphic design applications.281 Ink and Substrate (3) Students examine inks, substrates, and ink-substrate interactions. Students also develop skills in ink and paper testing.

Prerequisite: TGRA 180, 181, 182, 183.
283 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. Additional content will cover packaging as it relates to the specific substrates and output processes.

Prerequisite: TGRA 182.
285 Digital Imaging 2 (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: preflighting, imposition, layout, print settings, fonts/typography, and print workflows. Included will be topics on digital toner, and digital ink jet.

286 Digital Photography 1 (3) This digital photography course emphasizes design, exposure techniques, composition, basic digital image capture, and electronic image manipulation.

381 Color Management (3) Color management is 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 available within the area of graphic communications.

Prerequisite: TGRA 182.
382 Digital Imaging 3 (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 stressed.

Prerequisite: TGRA 285.
383 Offset Lithographic Presswork (3) Advanced study of lithographic printing designed to provide an understanding of the control, operation, and advancements of the lithographic printing press. Information for both Web and sheet fed operations will be included with emphasis on monitoring and controlling printing press characteristics.

Prerequisite: TGRA 180, 182, 285.
385 Cross Media Communications (3) Students will explore 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 the student to understand how use of cross media publishing can improve return on investment of traditional print media.

Prerequisite: TGRA 182.
386 Planning and Finishing (3) Designed to provide an understanding of the requirements in today's finishing operations. Also covers the many aspects of mailing and fulfillment vital to today's print operations. Included will be an understanding of the specifications and requirements necessary to produce materials in a cost effective manner.

387 Digital Photography 2 (3) Emphasizes color theory, digital editing software, and composition principles as they relate to the photographic process. Applications to commercial photography, lighting, and the photographic studio will also be covered.

Prerequisite: TGRA 286 or ART 231 or the equivalent.
480 Capstone for Graphic Communications (3) A capstone course that focuses on the research of emerging trends, processes, and technologies in the contemporary graphic arts/printing industry. Students are required to complete a senior research project related to the graphic arts/printing industry.

Prerequisite: senior standing.
484 Practicum in Graphic Communications (3) Integration of graphic communications processes, 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 class. These skills include: customer service, design and layout, time management, planning, press production/supervision, and quality control.

Prerequisite: senior standing or by permission of the department chairperson.

486 Advanced Management Systems (3) Designed to cover the latest in the facilitation and control of graphic information distribution, this course will cover database management, variable data publishing, and Digital Rights Management.

Prerequisite: senior standing.
488 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 by permission of the department chairperson.

489 Quality Control and Automation (3) Develops the student's understanding and knowledge within the areas of integration, automation, and Lean Manufacturing through an in-depth exploration of control systems used in the printing and publishing industries. Topics of discussion include plant and facility layout (equipment space and safety needs), logistics, inventory control, materials handling, and health
and safety concerns associated with print production (MSDS information, press safety, facility safety, etc.).

Prerequisite: senior standing or by permission of the department chairperson.

499 Problems in Graphic Communications (1-3) Individual advanced study and experimentation in graphic communications.

Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

## 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.

## MAJOR IN MUSIC COMPOSITION (BM), 92 credits

## PREFIX NO SHORT TITLE

| MUHI | 200 | Survey of Music Literature | 2 |
| :--- | :--- | :--- | :--- |
|  | 330 | Music History | 3 |
|  | 331 | Music History 2 | 3 |
| MUSC | 499 | Recital | 1 |
| MUST | 101 | Sight Singing and Ear Training | 1 |
|  | 102 | Sight Singing and Ear Training | 1 |
|  | 111 | Music Theory | 2 |
|  | 112 | Music Theory | 2 |

121 ..... 3122 Acoustics for Musicians
3
201 Sight Singing and Ear Training 201 Sight Singing and Ear Training ..... 1
202 Sight Singing and Ear Training ..... 1
211 Music Theory ..... 2
212 Music Theory ..... 2
221 Music Composition 1 ..... 2
222 Music Composition 2 ..... 2
241 Computer Music 1 ..... 3
311 Mus Thry: Form and Analy ..... 2
312 MusTh: 18th-Cent Counterpoint ..... 2
321 Composition ..... 2
350 Computer Composition 1 ..... 2
411 Instrumentation and Orchestrtn ..... 2

|  | 417 | Thry of 20th 21st-Cent Music | 3 |
| :---: | :---: | :---: | :---: |
|  | 495 | Composition-Project Recital (1-3) | 3 |
| 8 credits from |  |  |  |
| MUSC | 340 | Large Instrumental Ensemble (1) |  |
|  | 341 | Large Instrumental Ensemble (.5) |  |
|  | 350 | Large Vocal Ensemble (1) |  |
|  | 351 | Large Vocal Ensemble (.5) |  |
| MUSP | 436 | Ensemble for New Music (1) | 8 |
| 2 credits from |  |  |  |
| MUSP | 325 | Secondary Study (Piano) (1) |  |
|  | 326 | Group Piano (1) | 2 |
| 12 credits from |  |  |  |
| MUSP | 201 | Principal Study (2) |  |
|  | 401 | Principal Study (2) | 12 |
| Concentration 1: Instrumental and vocal |  |  |  |
| MUST | 322 | Composition | 2 |
|  | 420 | Sixteenth-Century Counterpoint | 3 |
|  | 431 | Composition | 2 |
|  | 432 | Composition | 2 |
| 2 credits from |  |  |  |
| MUST | 410 | Choral Arranging (2) |  |
|  | 413 | Band Arranging (2) | 2 |
| 9 credits from |  |  |  |
| MMP | 301 | Songwriting (2) |  |
| MUST | 341 | Creat Prac in Sonic Arts Tech (2) |  |
|  | 342 | Computer Music 2 (3) |  |
|  | 410 | Choral Arranging (2) |  |
|  | 412 | 17th 18th Cent Compositn Pract (2-3) |  |
|  | 413 | Band Arranging (2) |  |
|  | 414 | Jazz Arranging (2) |  |
|  | 416 | Theory of 19th-Century Music (3) |  |
|  | 421 | Analytical Technique (3) |  |
|  | 443 | Adv Topics in Computer Music (3) |  |
|  | 444 | Human-Computer Interface Desg (3) |  |
|  | 445 | Music Perception (3) |  |
|  | 450 | Computer Music Composition 2 (2) |  |
|  | 491 | Indep Study in Music Theory (1-3) |  |
|  | 492 | Special Topics (2) | 9 |
| Concentration 2: Sonic arts technology |  |  |  |
| MMP | 235 | Recording Technology 1 | 3 |
| MUST | 341 | Creat Prac in Sonic Arts Tech | 2 |
|  | 342 | Computer Music 2 | 3 |
|  | 450 | Computer Music Composition 2 | 2 |

10 credits from
MMP 100 Survey of the Music Industry (3)
236 Recording Technology 2 (3)
301 Songwriting (2)
330 Live Sound and Recording (3)

|  | 335 | Mixing (3) |
| :--- | :--- | :--- |
| MUST | 322 | Composition (2) |
|  | 410 | Choral Arranging (2) |
| 412 | 17th 18th Cent Compositn Pract (2-3) |  |
|  | 413 | Band Arranging (2) |
| 414 | Jazz Arranging (2) |  |
| 416 | Theory of 19th-Century Music (3) |  |
| 420 | Sixteenth-Century Counterpoint (3) |  |
| 421 | Analytical Technique (3) |  |
| 431 | Composition (2) |  |
| 432 | Composition (2) |  |
| 443 | Adv Topics in Computer Music (3) |  |
| 444 | Human-Computer Interface Desg (3) |  |
| 445 | Music Perception (3) |  |
| 491 | Indep Study in Music Theory (1-3) | 10 |
|  |  | 92 crs |

## MAJOR IN MUSIC MEDIA PRODUCTION, 73 credits

## PREFIX NO

MMP 100
SHORT TITLE3
125 Acoustics ..... 3
220 Electronics and Studio Mainten ..... 2
235 Recording Technology 1 ..... 3
236 Recording Technology 2 ..... 3
301 Songwriting ..... 2
330 Live Sound and Recording ..... 3
335 Mixing ..... 3
430 Production Workshop ..... 3
495 MMP Project and Recital ..... 3
MUHI 200 Survey of Music Literature ..... 2
330 Music History ..... 3
331 Music History 2 ..... 3
MUSC 499 Recital ..... 1
MUST 101 Sight Singing and Ear Training ..... 1
102 Sight Singing and Ear Training ..... 1
111 Music Theory ..... 2
112 Music Theory ..... 2
121 Introduction to Computer Music ..... 3
201 Sight Singing and Ear Training ..... 1
202 Sight Singing and Ear Training ..... 1
211 Music Theory ..... 2
212 Music Theory ..... 2
311 Mus Thry: Form and Analy ..... 2
411 Instrumentation and Orchestrtn ..... 2
2 credits fromMUSP 325 Secondary Study (Piano) (1)or
326 Group Piano (1)2
8 credits from

CREDITS

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|  | 201 | Sight Singing and Ear Training | 1 |  | 202 | Sight Singing and Ear Training | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 202 | Sight Singing and Ear Training | 1 |  | 211 | Music Theory | 2 |
|  | 211 | Music Theory | 2 |  | 212 | Music Theory | 2 |
|  | 212 | Music Theory | 2 |  | 311 | Mus Thry: Form and Analy | 2 |
|  | 311 | Mus Thry: Form and Analy | 2 |  |  |  |  |
|  | 312 | MusTh: 18th-Cent Counterpoint | 2 | Complete one concentration <br> Piano: Classical studies concentration |  |  |  |
|  |  |  |  |  |  |  |  |
| 1-3 credits from |  |  |  | MUHI | 401 | Piano Literature | 2 |
| MUSP | 325 | Secondary Study (Piano) (1) | 1-3 | MUSP | 200 | Major Study (1-4) |  |
|  |  |  |  |  | or |  |  |
| 2-5 credits from |  |  | 2-5 |  | 400 | Major Study (1-4) | 23 |
| MUSP | 327 | Sec Study (Org and Harpschrd) (1) |  |  | 206 | Piano Accompanying (1-3) | 1 |
|  |  |  |  |  | 306 | Piano Accompanying (1-3) | 1 |
| 3 credits from |  |  |  |  | 425 | Elemtry Piano Pedagogy and Lit | 3 |
| MUSC | 350 | Large Vocal Ensemble (1-3) |  |  | 426 | Intermd Piano Pedagogy and Lit | 3 |
|  | 351 | Large Vocal Ensemble (.5-3) | 3 | MUST | 312 | MusTh: 18th-Cent Counterpoint | 2 |
| 1 credit from ensemble electives |  |  | 1 | $3-5$ credits from |  |  |  |
|  |  |  |  | MUSP | 202 | Secondary Study (1-4) | 3-5 |
| 1-3 credits from |  |  |  |  |  |  |  |
| MUSC and MUSP electives |  |  | 1-3 | 0-2 credits from |  |  |  |
|  |  |  |  | MUSP | 430 | Small Ensemble (Woodwinds) (1-4) |  |
| 2-4 credits from |  |  |  |  | 431 | Small Ensemble (Brass) (1-4) |  |
| MMP | 140 | Computer Music 1 (3) |  |  | 432 | Small Ensemble (Percussion) (1-4) |  |
| MUST | 221 | Music Composition 1 (2) |  |  | 433 | Small Ensemble (Strings) (1-4) |  |
|  | 341 | Creat Prac in Sonic Arts Tech (2) |  |  | 434 | Small Ensemble (Harp) (1-4) | 0-2 |
|  | 412 | 17th 18th Cent Compositn Pract (2-3) |  |  |  |  |  |
|  | 420 | Sixteenth-Century Counterpoint (3) | 2-4 | 7-8 credits from |  |  |  |
|  |  |  |  | MUSP | 435 | Small Ensemble (Piano) (1-2) | 7-8 |
| 3-8 credits from |  |  |  |  |  |  |  |
| MUHI | 435 | Music in the Baroque Era (2) |  | 2-4 credits from |  |  |  |
|  | 436 | Music in the Classical Era (2) |  | MUSC | 340 | Large Instrumental Ensemble (1) |  |
|  | 437 | Music in the Romantic Era (2) |  |  | 341 | Large Instrumental Ensemble (.5) |  |
|  | 488 | Hist Harpsich Lit and Design (1) |  |  | 350 | Large Vocal Ensemble (1) |  |
| MUST | 421 | Analytical Technique (3) | 3-8 |  | 351 | Large Vocal Ensemble (.5) | 2-4 |
|  |  |  | 91 crs |  |  |  |  |
| MUSP 202 must be voice. MUSP 327 must be harpsichord. |  |  |  | MUST Choose 2 credits from MUST courses |  |  | 2 |
| MAJOR IN MUSIC PERFORMANCE: PIANO (BM), 90 credits |  |  |  | Music Electives: MMP, MUHI, MUSE, MUST |  |  | 6-8 |
|  |  |  |  | General electives |  |  | 5-6 |
| PREFIX NO |  | SHORT TITLE CREDITS |  |  |  |  |  |
|  |  |  |  | Piano: | azz stu | ies concentration |  |
| MUHI | 200 | Survey of Music Literature | 2 | MGT | 241 | The Entrepreneurial Experience | 3 |
|  | 330 | Music History | 3 | MUHI | 441 | Jazz History | 2 |
|  | 331 | Music History 2 | 3 | MUSE | 465 | Jazz Pedagogy | 2 |
| MUSC | 499 | Recital | 1 | MUSP | 200 | Major Study (1-4) |  |
| MUSP | 290 | Introduction to Conducting | 2 |  | or |  |  |
|  | 397 | Junior Recital | 1 |  | 400 | Major Study (1-4) | 20 |
|  | 498 | Senior Recital | 2 |  | 204 | Jazz Study (1-2) | 3 |
| MUST | 101 | Sight Singing and Ear Training | 1 |  | 231 | Jazz Combo (1-4) | 8 |
|  | 102 | Sight Singing and Ear Training | 1 |  | 456 | Jazz Improv 1 | 2 |
|  | 111 | Music Theory | 2 |  | 457 | Jazz Improv 2 | 2 |
|  | 112 | Music Theory | 2 |  | 462 | Jazz Piano Lab | 1 |
|  | 201 | Sight Singing and Ear Training | 1 |  | 499 | Independ Study in Musical Perf (1-4) | 3 |


| MUST | 223 | Jazz Composition | 2 |  | 431 | Small Ensemble (Brass) (1-4) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 250 | Jazz Theory | 2 |  | 432 | Small Ensemble (Percussion) (1-4) |  |
|  | 414 | Jazz Arranging | 2 |  | 433 | Small Ensemble (Strings) (1-4) |  |
|  | 415 | Jazz Arranging 2 | 2 |  | 434 | Small Ensemble (Harp) (1-4) | 3-4 |
| 2 credits | from |  |  | MUST | 312 | MusTh: 18th-Cent Counterpoint | 2 |
| MUSC | 340 | Large Instrumental Ensemble (1) |  |  |  |  |  |
|  | 341 | Large Instrumental Ensemble (.5) |  | 2 credit | from |  |  |
|  | 350 | Large Vocal Ensemble (1) |  | MUST | 411 | Instrumentation and Orchestrtn (2) |  |
|  | 351 | Large Vocal Ensemble (.5) | 2 |  | or |  |  |
|  |  |  |  |  | 413 | Band Arranging (2) | 2 |
| 6 credits | from |  |  |  |  |  |  |
| MUSC | 340 | Large Instrumental Ensemble (1) |  | 2-4 cred | from |  |  |
|  | 341 | Large Instrumental Ensemble (.5) | 6 | MUST | 221 | Music Composition 1 (2) |  |
|  |  |  |  |  | 412 | 17th 18th Cent Compositn Pract (2-3) |  |
|  |  |  | 90 crs |  | 414 | Jazz Arranging (2) |  |
|  |  |  |  |  | 416 | Theory of 19th-Century Music (3) |  |
| MAJOR | IN | USIC PERFORMANCE: SYMPH | HONIC |  | 417 | Thry of 20th 21st-Cent Music (3) |  |
| INSTRU | MEN | TS (BM), 90 credits |  |  | 420 | Sixteenth-Century Counterpoint (3) |  |
|  |  |  |  |  | 421 | Analytical Technique (3) |  |
| PREFIX | NO | SHORT TITLE | CREDITS |  | 491 | Indep Study in Music Theory (1-3) | 2-4 |
| MUHI | 200 | Survey of Music Literature | 2 | 12 cred | from |  |  |
|  | 330 | Music History | 3 | MUSC | 340 | Large Instrumental Ensemble (1) |  |
|  | 331 | Music History 2 | 3 |  | or |  |  |
| MUSC | 499 | Recital | 1 |  | 341 | Large Instrumental Ensemble (.5) | 12* |
| MUSP | 290 | Introduction to Conducting | 2 |  |  |  |  |
|  | 325 | Secondary Study (Piano) (1) |  | *String | nd h | p primary students may count up to |  |
|  | or |  |  | 4 additi | nal re | gistrations in MUSP 433/434 toward |  |
|  | 326 | Group Piano (1) | 2 | satisfyin |  | 2 credits of MUSC large ensembles. |  |
|  | 397 | Junior Recital | 1 |  |  |  |  |
|  | 498 | Senior Recital | 2 | Elective |  |  |  |
| MUST | 101 | Sight Singing and Ear Training | 1 | MUHI | hoose | from 435, 436, 437, 438, 491, 492 | 4 |
|  | 102 | Sight Singing and Ear Training | 1 |  |  |  |  |
|  | 111 | Music Theory | 2 | MU Ful | 11 2-4 | credits from electives in music | 2-4 |
|  | 112 | Music Theory | 2 |  |  |  |  |
|  | 201 | Sight Singing and Ear Training | 1 | General | lectiv |  | 4 |
|  | 202 | Sight Singing and Ear Training | 1 |  |  |  |  |
|  | 211 | Music Theory | 2 | Sympho | ic Ins | ruments: Jazz studies concentration |  |
|  | 212 | Music Theory | 2 | MGT | 241 | The Entrepreneurial Experience | 3 |
|  | 311 | Mus Thry: Form and Analy | 2 | MUHI | 441 | Jazz History | 2 |
|  |  |  |  | MUSE | 465 | Jazz Pedagogy | 2 |
| Complet | one | oncentration |  | MUSP | 200 | Major Study (1-4) |  |
| Symphon | ic Ins | uments: Classical studies concentr | ation |  | or |  |  |
| MUSP | 200 | Major Study (1-4) |  |  | 400 | Major Study (1-4) | 20 |
|  | or |  |  |  | 203 | Minor Study (1-4) | 2 |
|  | 400 | Major Study (1-4) | 25 |  | 231 | Jazz Combo (1-4) | 7 |
|  | 202 | Secondary Study (1-4) | 2 |  | 456 | Jazz Improv 1 | 2 |
|  |  |  |  |  | 457 | Jazz Improv 2 | 2 |
| 2 credits | from |  |  |  | 462 | Jazz Piano Lab | 1 |
| MUSP | 420 | Wind and Perc Lit and Pedagogy |  |  | 499 | Independ Study in Musical Perf (1-4) | 3 |
|  | or |  |  | MUST | 223 | Jazz Composition | 2 |
|  | 423 | String and Harp Lit and Pedag (2) |  |  | 250 | Jazz Theory | 2 |
|  |  |  |  |  | 414 | Jazz Arranging | 2 |
| 3-4 credi | ts from |  |  |  | 415 | Jazz Arranging 2 | 2 |


| 2 credits from |  |  |  |
| :---: | :---: | :---: | :---: |
| MUSC | 340 | Large Instrumental Ensemble (1) |  |
|  | 341 | Large Instrumental Ensemble (.5) | 2 |
| 2 credits of MUSC must be in traditional ensemble on primary instrument |  |  |  |
| 6 credits from |  |  |  |
| MUSC | 340 | Large Instrumental Ensemble (1) |  |
|  | 341 | Large Instrumental Ensemble (.5) | 6 |
| 0-1 credits from |  |  |  |
| MUSP | 430 | Small Ensemble (Woodwinds) (1-4) |  |
|  | 431 | Small Ensemble (Brass) (1-4) |  |
|  | 432 | Small Ensemble (Percussion) (1-4) |  |
|  | 433 | Small Ensemble (Strings) (1-4) |  |
|  | 434 | Small Ensemble (Harp) (1-4) | 0-1 |
|  |  |  | 90 crs |
| MAJOR IN MUSIC PERFORMANCE: VOICE (BM), 94 credits |  |  |  |
| PREFIX NO |  | SHORT TITLE | CREDITS |
| 25 credits from |  |  |  |
| MUSP | 200 | Major Study (1-4) | 25 |
| FR | 101 | Beginning French 1 | 4 |
|  | 102 | Beginning French 2 | 4 |
| GER | 101 | Beginning German 1 | 4 |
|  | 102 | Beginning German 2 | 4 |
| MUHI | 200 | Survey of Music Literature | 2 |
|  | 330 | Music History | 3 |
|  | 331 | Music History 2 | 3 |
| MUSC | 499 | Recital | 1 |
| MUSP | 290 | Introduction to Conducting | 2 |
|  | 348 | Opera Workshop (1) | 2 |
|  | 397 | Junior Recital | 1 |
|  | 398 | Diction for Singers | 2 |
|  | 429 | Vocal Pedagogy | 2 |
|  | 440 | Vocal Diction and Literature | 2 |
|  | 498 | Senior Recital | 2 |
| MUST | 101 | Sight Singing and Ear Training | 1 |
|  | 102 | Sight Singing and Ear Training | 1 |
|  | 111 | Music Theory | 2 |
|  | 112 | Music Theory | 2 |
|  | 201 | Sight Singing and Ear Training | 1 |
|  | 202 | Sight Singing and Ear Training | 1 |
|  | 211 | Music Theory | 2 |
|  | 212 | Music Theory | 2 |
|  | 311 | Mus Thry: Form and Analy | 2 |
|  | 312 | MusTh: 18th-Cent Counterpoint | 2 |
| 2-6 credits from |  |  |  |
| MUSP | 325 | Secondary Study (Piano) (1) |  |
|  | or |  |  |
|  | 326 | Group Piano (1) | 2-6 |

6-10 credits from
DANC 110 Intro to Ballet 1 (1)
111 Intro to Ballet 2 (1)
120 Intro to Modern 1 (1)
121 Intro to Modern 2 (1)
130 Intro to Jazz 1 (1)
131 Intro to Jazz 2 (1)
232 Tap 1 (1)
MUHI 438 Opera History: 1780 to 1980 (2)
MUSP 348 Opera Workshop (1)
MUST 410 Choral Arranging (2)
THEA 232 Acting 1 (3)
94 crs
A minimum of four university-level semesters of language study (at least two each in French and German) must be completed at the appropriate level to satisfy the requirements of the BM degree in voice. Placement tests are available at the Department of Modern Languages and Classics. 4 credits of SP 101 or LAT 101 may be substituted for 4 credits of FR 102 or GER 102.

## MINOR IN MUSIC: HISTORY, 24 credits

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| 4-6 credits from |  |  |  |
| MUHI | 435 | Music in the Baroque Era (2) |  |
|  | 436 | Music in the Classical Era (2) |  |
|  | 437 | Music in the Romantic Era (2) |  |
|  | 438 | Opera History: 1780 to 1980 (2) | 4-6 |
| 4-8 credits from |  |  |  |
| MUHI | 105 | Mus and Pop Culture in America (3) |  |
|  | 491 | Indep Study in Music History (1-3) |  |
| and/or MUHI 400-level courses |  |  | 4-8 |
| 4-6 credits from |  |  |  |
| MUST | 311 | Mus Thry: Form and Analy (2) |  |
|  | 312 | MusTh: 18th-Cent Counterpoint (2) |  |
|  | 416 | Theory of 19th-Century Music (3) |  |
|  | 417 | Thry of 20th 21st-Cent Music (3) |  |
|  | 420 | Sixteenth-Century Counterpoint (3) |  |
|  | 421 | Analytical Technique (3) | 4-6 |

3-4 credits from
AHS 100 Introduction to Art (3)
DANC 100 Intro to Dance History (3)
THEA 100 Intro to Theatre (3)
Any course in FR, GER, LAT, World History (Europe,

| Africa, Middle East, Asia) |  |  | 3-4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2 credits from large or small ensembles (one year) |  |  | 2 |
| Music elective |  |  | 2-3 | 3-4 credits from music electives |  |  | 3-4 |
|  |  |  | 24 crs |  |  |  | 24 crs |
| Open only to majors in music. |  |  |  | Not open to music majors. |  |  |  |
| MINOR IN MUSIC: JAZZ/COMMERCIAL, 25 credits |  |  |  | MINOR IN MUSIC: PIANO, 24 credits |  |  |  |
| PREFIX NO |  | SHORT TITLE | CREDITS | PREFIX NO |  | SHORT TITLE | CREDITS |
| MUHI <br> MUSC <br> MUSP | 200 | Survey of Music Literature | 2 | MUHI | 200 | Survey of Music Literature | 2 |
|  | 499 | Recital | 1 |  | 331 | Music History 2 | 3 |
|  | 204 | Jazz Study (1-2) | 2 | MUSC | 499 | Recital | 1 |
|  | 231 | Jazz Combo (1-4) | 1 | MUST | 101 | Sight Singing and Ear Training | 1 |
|  | 456 | Jazz Improv 1 | 2 |  | 102 | Sight Singing and Ear Training | 1 |
|  | 457 | Jazz Improv 2 | 2 |  | 111 | Music Theory | 2 |
|  | 462 | Jazz Piano Lab | 1 |  | 112 | Music Theory | 2 |
| MUST | 101 | Sight Singing and Ear Training | 1 |  |  |  |  |
|  | 102 | Sight Singing and Ear Training | 1 | 2-3 credi | s from |  |  |
|  | 111 | Music Theory | 2 | MUHI | 401 | Piano Literature (2) |  |
|  | 112 | Music Theory | 2 | MUSP |  | Elemtry Piano Pedagogy and Lit (3) | ) $2-3$ |
|  | 250 | Jazz Theory | 2 |  |  |  |  |
|  |  |  |  | 7-9 credi | s from |  |  |
| 2 credits | from |  |  | MUSP | 203 | Minor Study (1-4) | 7-9 |
| MUSC | 341 | Large Instrumental Ensemble | 2 |  |  |  |  |
| 4 credits | from |  |  | 0-2 credi accompa |  | large and small ensemble (two piano or small ensemble, or piano in chamb |  |
| MUHI | 441 | Jazz History (2) |  | group ac | eptab |  | 0-2 |
| MUSE | 465 | Jazz Pedagogy (2) |  |  |  |  |  |
| MUST | 223 | Jazz Composition (2) |  |  |  |  | 24 crs |
|  | 414 | Jazz Arranging (2) |  |  |  |  |  |
|  | 415 | Jazz Arranging 2 (2) |  | MINOR | IN M | USIC: SACRED, 26 credits |  |
| MUSP | 204 | Jazz Study (1-2) | 4 |  |  |  |  |
|  |  |  |  | PREFIX | NO | SHORT TITLE CRL | CREDITS |
|  |  |  | 25 crs |  |  |  |  |
|  |  |  |  | MUHI | 200 | Survey of Music Literature | 2 |
| MINOR | IN M | USIC: LITERATURE, 24 credits |  | MUSC | 499 | Recital | 1 |
| PREFIX | NO | SHORT TITLE | CREDITS | 9 credits | from |  |  |
|  |  |  |  | MUHI | 330 | Music History (3) |  |
| MUHI | 200 | Survey of Music Literature | 2 |  | 331 | Music History 2 (3) |  |
|  | 331 | Music History 2 | 3 | MUST | 101 | Sight Singing and Ear Training (1) |  |
| MUSC | 499 | Recital | 1 |  | 102 | Sight Singing and Ear Training (1) |  |
| MUST | 101 | Sight Singing and Ear Training | 1 |  | 111 | Music Theory (2) |  |
|  | 102 | Sight Singing and Ear Training | 1 |  | 112 | Music Theory (2) | 9 |
|  | 111 | Music Theory | 2 |  |  |  |  |
|  | 112 | Music Theory | 2 | 2-5 credi | s from |  |  |
|  |  |  |  | MUHI | 498 | Church Choral Music Hymnody (3) |  |
| 3-4 cred | ts from |  |  | MUSP | 290 | Introduction to Conducting (2) | 2-5 |
| MUHI | 105 | Mus and Pop Culture in America (3) |  |  |  |  |  |
|  | 330 | Music History (3) |  | 0-1 credi | s from |  |  |
|  | 496 | Hist of Organ Lit and Design (2) |  | MUSP | 437 | Sm Ens (Org and Ch Musc) (1) |  |
|  | 498 | Church Choral Music Hymnody (3) | ) 3-4 |  | 438 | Small Ensemble (Vocal) (1) | 0-1 |
| 3 credits | from | pplied music | 3 | 1-3 credi | s from |  |  |


| MUSC | 350 | Large Vocal Ensemble (1-3) |  |
| :---: | :---: | :---: | :---: |
|  | 351 | Large Vocal Ensemble (.5-3) | 1-3 |
| Complete one concentration |  |  |  |
| Concentration A: Organ, 8 credits |  |  |  |
| MUHI | 496 | Hist of Organ Lit and Design | 2 |
| MUSE | 458 | Methods of Organ Teaching | 1 |
| MUSP | 203 | Minor Study (1-4) | 3 |
|  | 377 | Church Music: Services Admin | 2 |
|  |  |  | 8 crs |
| Concentration B: Voice, 8 credits |  |  |  |
| MUSP | 203 | Minor Study (1-4) | 3-4 |
| 4-5 credits from |  |  |  |
| MUHI | 330 | Music History (3) |  |
|  | 331 | Music History 2 (3) |  |
|  | 435 | Music in the Baroque Era (2) |  |
|  | 436 | Music in the Classical Era (2) |  |
|  | 437 | Music in the Romantic Era (2) |  |
| MUST | 112 | Music Theory (2) |  |
|  | 412 | 17th 18th Cent Compositn Pract (2-3) | 4-5 |
|  |  |  | 8 crs |

## MINOR IN MUSIC: SYMPHONIC INSTRUMENTS OR GUITAR, 24 credits



Guitar minors may satisfy the ensemble requirements by taking 3 credits of small ensemble (strings).

## MINOR IN MUSIC: THEORY, 24 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| MUHI | 200 | Survey of Music Literature | 2 |
| MUSC | 499 | Recital | 1 |
| MUST | 101 | Sight Singing and Ear Training | 1 |
|  | 102 | Sight Singing and Ear Training | 1 |
|  | 111 | Music Theory | 2 |
|  | 112 | Music Theory | 2 |
|  | 201 | Sight Singing and Ear Training | 1 |
|  | 202 | Sight Singing and Ear Training | 1 |
|  | 211 | Music Theory | 2 |
|  | 212 | Music Theory | 2 |
| 2 credits from |  |  |  |
| MUSP | 203 | Minor Study (1-4) | 2 |
| 2 credits from |  |  |  |
| MUSP | 325 | Secondary Study (Piano) (1) |  |
|  | or |  |  |
|  | 326 | Group Piano (1) | 2 |
| 2 credits from |  |  |  |
| Large and small ensemble (1 year) |  |  | 2 |
| 3 credits from electives in music |  |  | 3 |

24 crs
Not open to music majors.

## MINOR IN MUSIC: VOICE, 24 credits

PREFIX NO SHORTTITLE CREDITS
$\begin{array}{llll}\text { MUHI } & 200 & \text { Survey of Music Literature }\end{array}$
MUSC 499 Recital 1
MUSP 203 Minor Study (1-4) 4
MUST 101 Sight Singing and Ear Training 1
102 Sight Singing and Ear Training 1
111 Music Theory 2
112 Music Theory 2
2 credits from
MUSP 325 Secondary Study (Piano) (1)
326 Group Piano (1)
327 Sec Study (Org and Harpschrd) (1)
2

2-4 credits from
MUSC 350 Large Vocal Ensemble (1-3)
351 Large Vocal Ensemble (.5-3)
5-7 credits from electives in music

## 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 and Teachers College for the descriptions of these courses and other professional requirements of the teacher education program.

## ALL-GRADE EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | ---: |
| Professional education sequence, 42 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 465 | Elective Student Teaching | 5 |
| MUSE | 100 | Intro to Music Ed 1 | 2 |
|  | 150 | Intro to Music Ed 2 | 2 |
|  | 350 | Contemporary Issues Music Ed | 2 |
|  | 351 | Elem General Music Methods | 3 |
|  | 353 | Secondary Generl Music Methods | 3 |
|  | 355 | Instrumental Music Methods 1 | 3 |
|  | 375 | Instrumental Music Methods 2 | 3 |
|  | 470 | Student Teaching in Music | 7 |

42 crs
Special Methods, Instrumental and General Music: MUSE 355 and 375; Vocal and General Music: MUSE 356, 376. C or better grades are required in all MUSE courses to satisfy prerequisites. See Professional Education Assessment/Decision Points, p. 389, for additional information.

## TEACHING MAJOR IN MUSIC EDUCATION: INSTRUMENTAL AND GENERAL (BA/BS), 102 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| MUHI | 200 | Survey of Music Literature | 2 |
|  | 330 | Music History | 3 |
|  | 331 | Music History 2 | 3 |
| MUSC | 499 | Recital | 1 |
| MUSE | 250 | Brass Techniques | 2 |
|  | 252 | Woodwind Techniques 1 | 2 |
|  | 253 | Woodwind Techniques 2 | 2 |
|  | 254 | Percussion Techniques | 1 |
|  | 256 | String Techniques | 2 |
|  | 390 | Instrumental Laboratory (.5) | 1 |
| MUSP | 290 | Introduction to Conducting | 2 |
|  | 390 | Instrumental Cond and Reh Tech | 2 |
| MUST | 101 | Sight Singing and Ear Training | 1 |


|  | 102 | Sight Singing and Ear Training | 1 |
| :---: | :---: | :---: | :---: |
|  | 111 | Music Theory | 2 |
|  | 112 | Music Theory | 2 |
|  | 201 | Sight Singing and Ear Training | 1 |
|  | 202 | Sight Singing and Ear Training | 1 |
|  | 211 | Music Theory | 2 |
|  | 212 | Music Theory | 2 |
|  | 311 | Mus Thry: Form and Analy | 2 |
| 7 credits from |  |  |  |
| MUSC | 340 | Large Instrumental Ensemble (.5-3) |  |
|  | 341 | Large Instrumental Ensemble (.5-3) | ) |
| 12 credits from |  |  |  |
| MUSP applied primary instrument |  |  | 12 |
| 2 credits from |  |  |  |
| MUSP | 325 | Secondary Study (Piano) (1) |  |
|  | 326 | Group Piano (1) | 2 |
| 2 credits from |  |  |  |
| MUST | 411 | Instrumentation and Orchestrtn (2) |  |
|  | 413 | Band Arranging (2) | 2 |
|  |  |  | 60 crs |
|  |  |  | 102 crs |
| Piano primary takes 2 credits in minor voice instead of MUSP 325, 326. |  |  |  |
| TEACHING MAJOR IN MUSIC EDUCATION: VOCAL AND GENERAL (BA/BS), 102 credits |  |  |  |
| PREFIX | NO | SHORT TITLE | CREDITS |
| MUHI | 200 | Survey of Music Literature | 2 |
|  | 330 | Music History | 3 |
|  | 331 | Music History 2 | 3 |
| MUSC | 499 | Recital | 1 |
| MUSE | 258 | Voice Techniques | 2 |
|  | 391 | Choral Laboratory (.5) | 1 |
|  | 457 | Specl Approaches: Voc Gen Maj | 3 |
| MUSP | 290 | Introduction to Conducting | 2 |
|  | 391 | Choral Conducting and Reh Tech | 2 |
|  | 398 | Diction for Singers | 2 |
| MUST | 101 | Sight Singing and Ear Training | 1 |
|  | 102 | Sight Singing and Ear Training | 1 |
|  | 111 | Music Theory | 2 |
|  | 112 | Music Theory | 2 |
|  | 201 | Sight Singing and Ear Training | 1 |
|  | 202 | Sight Singing and Ear Training | 1 |
|  | 211 | Music Theory | 2 |
|  | 212 | Music Theory | 2 |
|  | 311 | Mus Thry: Form and Analy | 2 |

111 Music Theory 2
Music Theory 2
202 Sight Singing and Ear Training 1
211 Music Theory 2
212 Music Theory 2
311 Mus Thry: Form and Analy 2

7 credits from

2 credits from
MUSP 325 Secondary Study (Piano) (1)
326 Group Piano (1)
2

2 credits from
MUST 411 Instrumentation and Orchestrtn (2)
3 Band Arranging (2)
60 crs
102 crs
Piano primary takes 2 credits in minor voice instead of MUSP 325, 326.

## TEACHING MAJOR IN MUSIC EDUCATION: VOCAL AND GENERAL (BA/BS), 102 credits

410 Choral Arranging
7 credits from
$\begin{array}{ccc}\text { MUSC } & 350 & \text { Large Vocal Ensemble (1-3) } \\ & 351 & \text { Large Vocal Ensemble (.5-3) }\end{array}$

12 credits from
MUSP applied voice or piano

4 credits from
MUSP 325 Secondary Study (Piano) (1)
326 Group Piano (1)

60 crs
102 crs
Piano primary takes 4 credits in minor voice instead of MUSP 325, 326.

## CERTIFICATE IN ENTREPRENEURIAL MUSIC, 14 credits <br> (See Certificates on page 21.)

## MUSIC MEDIA PRODUCTION (MMP)

(There is a fee for all courses in the School of Music. Most courses are open only to majors and minors.)

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.

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.
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.

## 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.

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.

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.

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.

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.

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.

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 leadsheet writing, demo production, copyright protection, and publishing of commercial songs is also provided.

Prerequisite: permission of the instructor.
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.

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.

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.

## 491 Independent Study in Music Engineering Technology

 (1-3) 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.

## 492 Special Topics in Music Media Production (1-6)

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.
494 Internship (1-3) 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.
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.

## MUSIC HISTORY AND MUSICOLOGY (MUHI)

(There is a fee for all courses in the School of Music. Most courses are open only to majors and minors.)

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.
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.

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.
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.
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.
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.

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.
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.
399 Collegium Musicum (1) The study, realization, and performance of medieval, Renaissance, and baroque music. Prerequisite: permission of the director of the school.

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.

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.
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.
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 postRomanticism.

Prerequisite: MUHI 200, 331.
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.
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.
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.
491 Independent Study in Music History (1-3) 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.
492 Special Topics in Musicology (1-3) 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.

## 493 Workshop in Music History and Musicology (1-3) 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.

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.
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.

## SCHOOL OF MUSIC (MUSC)

(There is a fee for all courses in the School of Music. Most courses are open only to majors and minors.)

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.

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.

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.

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.

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 credit requirements for graduation.

299X Experimental/Developmental Topics (1-6) 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.
340 Large Instrumental Ensemble (.5-3) 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.

341 Large Instrumental Ensemble (.5-3) 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.

350 Large Vocal Ensemble (1-3) 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.

351 Large Vocal Ensemble (.5-3) 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.

372 Musical Theatre Workshop (2-10) 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.
471 Musical Theatre in America (2) A study of the history of American musical theatre. A general overview of the repertoire.

493 Workshop in Music (1-3) 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.

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.

## MUSIC EDUCATION (MUSE)

(There is a fee for all courses in the School of Music. Most courses are open only to majors and minors.)

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 K12 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.
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 $\mathrm{K}-12$ 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.
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 $W$.

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 $W$.

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 double reed instruction in school settings. This course is limited to 2 attempts. An attempt is defined as any registration resulting in a letter grade or $W$.

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 $W$.

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 $W$.

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.

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.

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 performancebased 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.
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.

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.

355 Instrumental Music Methods 1 (3) Focuses on developing the knowledge, performances, and dispositions required of school instrumental 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; or permission of the director of the school.

Open only to music majors and minors.
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.

375 Instrumental Music Methods 2 (3) Focuses on developing the knowledge, performances, and dispositions required of school instrumental 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 MUSP 290; or permission of the director of the school.

Open only to music majors and minors.

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.

390 Instrumental Laboratory (.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.

391 Choral Laboratory (.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.

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.

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.

## 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.

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.

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.

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.
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.
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.
491 Independent Study in Music Education (1-3) 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.

492 Special Topics in Music Education (1-6) 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.
493 Workshop in Music Education (1-3) A one- or twoweek 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.

## MUSIC PERFORMANCE (MUSP)

(There is a fee for all courses in the School of Music. Most courses are open only to majors and minors.)

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.

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.

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.

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.

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.

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.

136 Ensemble for New Music (0) Players of all instruments are organized into small groups for the study of contemporary chamber music.

## 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.

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.

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.

200 Major Study (1-4) 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.

201 Principal Study (1-4) 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.

202 Secondary Study (1-4) 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.

203 Minor Study (1-4) 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.

204 Jazz Study (1-2) 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.
206 Piano Accompanying (1-3) 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.

231 Jazz Combo (1-4) 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.

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.
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.

300 Orchestral Repertoire (1-3) 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.

306 Piano Accompanying (1-3) 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.

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.

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.

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.

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.

360 Popular Vocal Styles (1-4) 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.
370 Opera Productions (2-6) 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.

## 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.

## 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.

## 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.

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.
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.

400 Major Study (1-4) 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.

401 Principal Study (1-4) 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.

## 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.Open only to bachelor of music students with winds or percussion as their major instrument.

A total of 12 credits may be earned, but no more than 2 in any one semester or term.

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.

Open only to bachelor of music students with strings or harp as their major instrument.

A total of 12 credits may be earned, but no more than 2 in any one semester or term.

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.
Open only to bachelor of music students with strings as their major instrument.

A total of 12 credits may be earned, but no more than 2 in any one semester or term.

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.
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.

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.

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.

430 Small Ensemble (Woodwinds) (1-4) 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.

431 Small Ensemble (Brass) (1-4) 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.

432 Small Ensemble (Percussion) (1-4) 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.

433 Small Ensemble (Strings) (1-4) 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.

434 Small Ensemble (Harp) (1-4) 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.

435 Small Ensemble (Piano) (1-2) 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.

436 Ensemble for New Music (1-2) 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.

## 437 Small Ensemble (Organ and Church Music) (1-2)

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.

438 Small Ensemble (Vocal) (1-2) 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.

439 Small Ensemble (Guitar) (1-2) 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.

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.
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.
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.

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.
477 Continuo Playing and Keyboard Improvisation (1-2)
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.
490 Advanced Conducting (1-3) 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.
493 Workshop in Music Performance (1-3) A one- or twoweek 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.

495 Performance and Career Seminar 1 (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.
496 Performance and Career Seminar 2 (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.
497 Capstone in Entrepreneurial Music (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.
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.

499 Independent Study in Musical Performance (1-4) 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 the director of the school.
A total of 4 credits may be earned.

## MUSIC THEORY AND COMPOSITION (MUST)

 (There is a fee for all courses in the School of Music. Most courses are open only to majors and minors.)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.

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.
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.
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.
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.
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.
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.

201 Sight Singing and Ear Training (1) Continuation of MUST 102 emphasizing chromatic materials, modulating lines, four-part dictation, and aural analysis.

Prerequisite: grade of C or better in MUST 102.
202 Sight Singing and Ear Training (1) Continuation of MUST 201 emphasizing advanced chromatic and twentiethcentury aural materials.

Prerequisite: grade of $C$ or better in MUST 201.
211 Music Theory (2) Emphasizes nineteenth-century procedures through studies of compositional styles and analysis. Required mastering of diatonic and chromatic modulations and higher hierarchical chordal structures in tonal context and traditional forms. Advanced laboratory drill in analysis.

Prerequisite: grade of $C$ or better in MUST 112.
212 Music Theory (2) Continuation of MUST 211, emphasizing practices of the later nineteenth century and the twentieth century. Mastery of basic understanding of postromantic, impressionistic, expressionistic, neoclassical, serial, and other contemporary music required. Continued laboratory analysis.

Prerequisite: grade of $C$ or better in MUST 211.
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.

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.
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.

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.

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.
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.

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.
321 Composition (2) Private study. Development of basic craft through the writing of shorter instrumental and vocal compositions.

Prerequisite: MUST 202, 212, 222.
322 Composition (2) Continuation of MUST 321. Prerequisite: MUST 321.

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.
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.
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 212, 241, or permission of the instructor.

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 the instructor.
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.
412 Compositional Practices of the Seventeenth and Eighteenth Centuries (2-3) 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.
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.
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.
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.

416 Theory of Nineteenth-Century Music (3) Vocabulary, devices, tonal organization, and shaping forces that characterize the compositional practices of nineteenthcentury romanticism.

Prerequisite: MUST 311 (MUST 212 for composition majors); permission of the instructor.

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-firstcenturies.

Prerequisite: MUST 311 or permission of the instructor.
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.

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.

431 Composition (2) Private study. Continuation of MUST 322 and the writing of larger, longer works.

Prerequisite: MUST 322.
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.

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.
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.

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.
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.

491 Independent Study in Music Theory (1-3) 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.

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.

493 Workshop in Music Theory and Composition (1-3) 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.

495 Composition-Project Recital (1-3) 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.

## THEATRE AND DANCE

## B. Jenkins, Chairperson

## bsu.edu/theatre

The Department of Theatre and Dance offers BFA degree programs in Acting, Musical Theatre, and Dance, and BA/BS degree programs in Design and Technology, Theatrical Studies, Theatre Education, Directing and Stage Management, and Dance. Minor studies are also available in theatre and technical theatre. The Theatrical Studies concentration is recommended for students intending to pursue careers in theatre history, criticism, playwriting, or 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. 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. The department sponsors showcases in New York, Chicago, and Los Angeles for graduating seniors in the BFA programs. BFA students who do not participate in a showcase must complete a senior level capstone project during the senior year to complete the major.

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. Design and Technology students must present a portfolio at the end of each spring semester and must pass an exit portfolio review at the end of the junior or senior year to complete the program. Theatre Education students must complete interviews and other assessments as directed by Teacher's College. Directing, Stage Management, Theatrical Studies, 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 |  | DANC | 220 | Modern 1 (2) |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | 221 | Modern 2 (2) |
| PREFIX | NO | SHORT TITLE |  | 320 | Modern 3 (2) |
|  |  |  | 420 | Modern 4 (2) |  |


|  | 221 | Modern 2 (2) |  |
| :---: | :---: | :---: | :---: |
|  | 231 | Jazz 2 (2) |  |
|  | 232 | Tap 1 (1) |  |
|  | 240 | World Studio 1 (1) |  |
|  | 241 | World Studio 2 (1) |  |
|  | 281 | Musical Theatre Dance 2 (2) |  |
|  | 299X | Experimental Topics (0-12) |  |
|  | 310 | Ballet 3 (2) |  |
|  | 320 | Modern 3 (2) |  |
|  | 330 | Jazz 3 (2) |  |
|  | 332 | Tap 2 (1) |  |
|  | 410 | Ballet 4 (2) |  |
|  | 420 | Modern 4 (2) |  |
|  | 430 | Jazz 4 (2) |  |
|  | 487 | Choreography 2 (2) |  |
|  | 490 | Creative Project (2) |  |
|  | 496 | Senior Thesis (1-3) |  |
| THEA | 326 | Stage Lighting Technology (3) |  |
|  | 496 | Directed Study (1-9) |  |
|  | 499 | Internships (0-9) | 6 |
|  |  |  | 50 crs |
| MAJOR | IN DA | NCE (BFA), 85 credits |  |
| PREFIX | NO | SHORT TITLE | CREDITS |
| DANC | 200 | The Dancer's Body | 2 |
|  | 210 | Ballet 1 | 2 |
|  | 211 | Ballet 2 | 2 |
|  | 220 | Modern 1 | 2 |
|  | 221 | Modern 2 | 2 |
|  | 230 | Jazz 1 | 2 |
|  | 231 | Jazz 2 | 2 |
|  | 240 | World Studio 1 | 1 |
|  | 241 | World Studio 2 | 1 |
|  | 280 | Musical Theatre Dance 1 | 2 |
|  | 281 | Musical Theatre Dance 2 | 2 |
|  | 287 | Improvisation | 2 |
|  | 300 | Body Condition and Maintain | 2 |
|  | 301 | Dance History 1 | 3 |
|  | 302 | Dance History 2 | 3 |
|  | 310 | Ballet 3 | 2 |
|  | 315 | Technique Studio | 1 |
|  | 320 | Modern 3 | 2 |
|  | 330 | Jazz 3 | 2 |
|  | 387 | Choreography 1 | 2 |
|  | 410 | Ballet 4 | 2 |
|  | 420 | Modern 4 | 2 |
|  | 430 | Jazz 4 | 2 |
|  | 487 | Choreography 2 | 2 |
|  | 488 | Dance Pedagogy | 3 |
| THEA | 102 | Computers in Theatre and Dance | 3 |
|  | 105 | Freshman Experience | 0 |
|  | 107 | Design Awareness | 3 |
|  | 223 | Costume Technology | 3 |

221 Modern 2 (2)
232 Tap 1 (1)
240 World Studio 1 (1)
241 World Studio 2 (1)
281 Musical Theatre Dance 2 (2)
299X Experimental Topics (0-12)
310 Ballet 3 (2)
330 Jazz 3 (2)
332 Tap 2 (1)
410 Ballet 4 (2)
420 Modern 4 (2)
Jazz 4 (2)

490 Creative Project (2)
496 Senior Thesis (1-3)
326 Stage Lighting Technology (3)
496 Directed Study (1-9)
499 Internships (0-9)

211 Ballet
220 Modern 1
221 Modern 2
Jazz 1 2

240 World Studio 1 1
241 World Studio 2 1
280 Musical Theatre Dance $1 \quad 2$
281 Musical Theatre Dance 2
287 Improvisation 2
Body Condition and Maintain

302 Dance History 2
310 Ballet $3 \quad 2$
315 Technique Studio 1
Modern 3
330 Jazz 3 2
410 Ballet $4 \quad 2$
420 Modern $4 \quad 2$
430 Jazz 4 2
487 Choreography 2
488 Dance Pedagogy 3
105 Freshman Experience 0
107 Design Awareness 3
223 Costume Technology 3

232 Acting 1 3
270 Basic Musicianship $1 \quad 2$
280 Theatre and Dance Practicum (0-1) 2
334 Studio 1 3
405 Senior Experience 0
434 Immersion Experience (1-12) 3
1 credit from

| DANC | 232 | Tap 1 (1) |  |
| :---: | :---: | :---: | :---: |
|  | 332 | Tap 2 (1) | 1 |
| 2 credits from |  |  |  |
| DANC | 489 | Mainstage Dance Performance (1) | 2 |
| 4 credits from |  |  |  |
| DANC | 289 | Student Directed Dance Perform (1) |  |
|  | 389 | Studio Dance Performance (1) |  |
|  | 489 | Mainstage Dance Performance (1) | 4 |

6 credits of directed electives as indicated below:
4 credits from
DANC 310
Ballet 3 (2)
Ballet 4 (2)
or
320 Modern 3 (2)
420 Modern 4 (2)
or
330 Jazz 3 (2)
430 Jazz 4 (2)
4

2 credits from
DANC 310
Ballet 3 (2)
315 Technique Studio (1)
320 Modern 3 (2)
330 Jazz 3 (2)
410 Ballet 4 (2)
420 Modern 4 (2)
430 Jazz 4 (2)

MAJOR IN THEATRE (BA/BS), 58-67 credits

PREFIX NO SHORT TITLE
CREDITS

Core requirements, 32 credits
THEA 102 Computers in Theatre and Dance 3
103 Aesthetics of Theatre 1
104 Aesthetics of Theatre 2 3
105 Freshman Experience 0
107 Design Awareness 3
220 Stagecraft 3
232 Acting 1 3
250 Directing 1 3
280 Theatre and Dance Practicum (0-1) 2

322 Theatre of the $21^{\text {st }}$ Century 3
325 Dramaturgy
Dramaturgy

Electives, 14 credits from

| ENG | 410 | Adv Screenwriting (3) |
| :--- | :--- | :--- |
|  | 464 | Shakespeare (3) |
| TCOM | 487 | Video Production Seminar (3-6) |
| THEA | 150 | Introduction Theatre Education (3) |
|  | 223 | Costume Technology (3) |
| 229 | Stage Makeup (2) |  |
| 234 | Intro to the Singing Actor (3) |  |
| 291 | Stage Management (3) |  |
| 318 | Advanced Topics (3-6) |  |
| 324 | Musical Theatre History (3) |  |
| 326 | Stage Lighting Technology (3) |  |
| 329 | Costume History (3) |  |
| 340 | Playwriting 1 (3) |  |
| 350 | Directing 2 (3) |  |
| 352 | Directing Styles (3) |  |
| 353 | Acting and Directing History (3) |  |
| 354 | Directing for Young Audiences (3) |  |
| 380 | Advanced Practicum (1-9) |  |
| 391 | Advanced Stage Management (3) |  |
| 420 | Scene Design (3) |  |
| 423 | Costume Design (3) |  |
| 426 | Lighting Design (3) |  |
| 434 | Immersion Experience (1-12) |  |
| 450 | Directing 3 (3) |  |
| 491 | Theatre Management (3) |  |
| 496 | Directed Study (1-9) |  |

Up to three other THEA or DANC courses not listed above as approved by PDA or chairperson. Exception: THEA 318 may be taken up to four times total, but each must be on a different topic. Students are expected to take THEA 220 to meet the prerequisite for THEA 320.

## $58-67 \mathrm{crs}$

The theatrical studies 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 theatrical studies concentration. Students must also submit a Theatrical Studies 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.

## MAJOR IN THEATRE (BFA), 85-87 credits

## PREFIX NO SHORT TITLE CREDITS

Core requirements, 32 credits
THEA 102 Computers in Theatre and Dance 3
103 Aesthetics of Theatre $1 \quad 3$
104 Aesthetics of Theatre 23
105 Freshman Experience 0
107 Design Awareness 3
220 Stagecraft 3
232 Acting 1 3
250 Directing $1 \quad 3$
280 Theatre and Dance Practicum (0-1) 2
317 Pre-Modern Theatre History 3
319 Modern Theatre History 3
405 Senior Experience 0
435 Shakespeare Performance 3
32 crs
Complete one professional specialization
Acting concentration, 53 credits
Required courses
THEA 229 Stage Makeup 2
233 Acting 2 3
332 Freshman Performance Lab 1
333 Intro to Voice and Movement 2
334 Studio 1 3
335 Studio 2 3
336 Studio 3 3
337 Studio 4 3
338 Studio 5 3
339 Studio 6 3
353 Acting and Directing History 3
430 Studio 7 3
431 Studio 8 3
432 Studio 9 3
433 Studio 103
Electives, 12 credits from
THEA 434 Immersion Experience (1-12)
496 Directed Study (1-9)
499 Internships (0-9)
85 crs
The Acting BFA concentration is designed as a preprofessional, conservatory style program within a liberal arts education. Curriculum and performance opportunities are designed to prepare students for careers in theatre and/or advanced training at quality graduate schools or conservatories. Acting students are selected for this degree program by audition. In addition, acting students must have yearly interviews and pass yearly juried auditions every semester. 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.

## Musical theatre concentration, 53 credits <br> Required courses

DANC 110 Intro to Ballet $1 \quad 1$
111 Intro to Ballet $2 \quad 1$
131 Intro to Jazz $2 \quad 1$
132 Intro to Tap $1 \quad 1$
230 Jazz 1 2
232 Tap 1 1
280 Musical Theatre Dance $1 \quad 2$
281 Musical Theatre Dance 2
THEA 229 Stage Makeup 2
233 Acting 2
270 Basic Musicianship $1 \quad 2$
271 Basic Musicianship 2
272 Sight Singing $1 \quad 1$
273 Sight Singing $2 \quad 1$
274 Musical Theatre Ensemble 1
324 Musical Theatre History 3
328 Voice Lesson (1-2) 8
332 Freshman Performance Lab 1
334 Studio 1 3
335 Studio 2 3
371 Singing Actor 12
372 Singing Actor 2
373 Musical Theatre Scene Study 2
430 Studio 7 3
433 Studio 103

Electives, 2 credits from
THEA 434 Immersion Experience (1-12)
499 Internships (0-9)
$85-87 \mathrm{crs}$
The Musical Theatre BFA concentration is designed as a preprofessional, 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. All seniors will be expected to enroll in an immersive learning experience as well as audition for showcases. Those seniors not participating in the Chicago, Los Angeles, and/or New York showcases will be required to perform a half hour recital or cabaret. 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.

## MINOR IN TECHNICAL THEATRE FOR NON-THEATRE MAJORS, 20-21 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 nonTheatre Majors.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| THEA | 100 | Intro to Theatre | 3 |
|  | 220 | Stagecraft | 3 |
|  | 223 | Costume Technology | 3 |
|  | 280 | Theatre and Dance Practicum (0-1) | ) 1 |
|  | 320 | Design Skills | 2 |
|  | 326 | Stage Lighting Technology | 3 |
| 5-6 credits from |  |  |  |
| THEA | 106 | Styles and Concept (3) |  |
|  | 123 | Color Studies (2) |  |
|  | 221 | Advanced Stagecrafts (2) |  |
|  | 224 | Form and Materials (2) |  |
|  | 225 | Theatrical Drafting (2) |  |
|  | 229 | Stage Makeup (2) |  |
|  | 291 | Stage Management (3) |  |
|  | 299X | Experimental Topics (3) |  |
|  | 321 | Rendering for the Theatre (2) |  |
|  | 327 | Sound Technology (3) |  |
|  | 329 | Costume History (3) |  |
|  | 350 | Directing 2 (3) |  |
|  | 380 | Advanced Practicum (1-9) |  |
|  | 420 | Scene Design (3) |  |
|  | 421 | Stage Properties (3) |  |
|  | 423 | Costume Design (3) |  |
|  | 426 | Lighting Design (3) |  |
|  | 427 | Sound Design (3) |  |
|  | 429 | Makeup and Hair Design (3) | 5-6 |

## 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.

PREFIX NO SHORT TITLE
CREDITS
20-21 credits from
THEA 106 Styles and Concept (3)

```
123 Color Studies (2)
221 Advanced Stagecrafts (2)
223 Costume Technology (3)
224 Form and Materials (2)
225 Theatrical Drafting (2)
229 Stage Makeup (2)
291 Stage Management (3)
299X Experimental Topics (3)
320 Design Skills (2)
321 Rendering for the Theatre (2)
326 Stage Lighting Technology (3)
327 Sound Technology (3)
329 Costume History (3)
350 Directing 2 (3)
3 8 0 ~ A d v a n c e d ~ P r a c t i c u m ~ ( 1 - 9 )
4 2 0 ~ S c e n e ~ D e s i g n ~ ( 3 ) ~
421 Stage Properties (3)
423 Costume Design (3)
4 2 6 ~ L i g h t i n g ~ D e s i g n ~ ( 3 )
4 2 7 \text { Sound Design (3)}
4 2 9 ~ M a k e u p ~ a n d ~ H a i r ~ D e s i g n ~ ( 3 )
```

Not open to students in the Design and Technology concentration.

MINOR IN THEATRE, 19-20 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| THEA | 103 | Aesthetics of Theatre 1 | 3 |
|  | 104 | Aesthetics of Theatre 2 | 3 |
|  | 220 | Stagecraft | 3 |
|  | 232 | Acting 1 | 3 |
|  | 280 | Theatre and Dance Practicum (0-1) | 2 |

Electives: 5-6 credits from any courses in THEA, other than THEA 100. No more than one elective course at the $100-l e v e l$ will be counted.

## 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 and Teachers College for the descriptions of these courses and other professional requirements of the teacher education program.

TEACHING MAJOR IN THEATRE (BA/BS),
85-86 credits
PREFIX NO SHORT TITLE
CREDITS

Core requirements, 32 credits
THEA 102 Computers in Theatre and Dance 3
103 Aesthetics of Theatre $1 \quad 3$
104 Aesthetics of Theatre 2
105 Freshman Experience 0
107 Design Awareness 3
220 Stagecraft 3
232 Acting 1 3
250 Directing 1 3
280 Theatre and Dance Practicum (0-1) 2
317 Pre-Modern Theatre History 3
319 Modern Theatre History 3
405 Senior Experience 0
435 Shakespeare Performance 3
32 crs
Required courses, 6 credits

| THEA | 350 | Directing 2 | 3 |
| :--- | :--- | :--- | :--- |
|  | 354 | Directing for Young Audiences | 3 |

354 Directing for Young Audiences 3
Electives, 5-6 credits from
THEA 223 Costume Technology (3)
229 Stage Makeup (2)
233 Acting 2 (3)
318 Advanced Topics (3-6)
324 Musical Theatre History (3)
329 Costume History (3)
340 Playwriting 1 (3)
352 Directing Styles (3)
353 Acting and Directing History (3)
450 Directing 3 (3)
491 Theatre Management (3) 5-6
43-44 crs
THEA 318 may be taken twice for fulfillment of electives, but each must be on a different topic.

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| Professional education sequence, 42 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed |  |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 320 | Read Div Sec Cont Class | 3 |
|  | 380 | Princ of Tchng in Sec School | 3 |
| THEA | 150 | Introduction Theatre Education | 3 |
|  | 295 | Intro to Teaching Methods | 3 |
|  | 396 | Teaching and Administration | 3 |
| Student teaching |  |  |  |

See Professional Education Assessment/Decision Points, p. 389, for additional information.

## 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.

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.

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.

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.

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.

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.

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.

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.

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.
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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

289 Student-Directed Dance Performance (1) This course provides students with 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.

299X Experimental/Developmental Topics (0-12) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 12 credits may be earned.
300 Body Conditioning and Maintenance (2) A specialize study of specific body therapies utilized to preserve, protect, and maintains 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.

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.
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.
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.

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.

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.

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.

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.

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.
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.
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.

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.
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.
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.

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.

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.

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.
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.

490 Creative Project (2) Designed as a project in choreography for advanced dance students.

Prerequisite: senior standing.
A total of 6 credits may be earned, but no more than 2 in any one semester or term.

496 Senior Thesis (1-3) 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.

## 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.
102 Computers in Theatre and Dance (3) Introduction to computer usage in theatre and dance. Emphasizes computer competency and the development of simple computer applications.

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.

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.

105 Freshman Experience (0) Introduces departmental, collegiate, and university courses, programs, practices, and policies. Intended to assist transition to university life. Offered credit/no credit only.

Open only to theatre and dance majors.
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 concentration, or the teaching major in theatre.

107 Design Awareness for Theatre and Dance (3) A teamtaught, 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.
123 Color Studies in Theatrical Design (2) A fundamental practical course to explore and apply basic color principles and elements in theatrical applications. Sessions are in a laboratory format. Students are trained in application of various elements of color to develop their visual skills. This course enables the student to prepare for upper level design/tech courses.

Prerequisite: permission of the department chairperson. Open only to theatre majors and minors.

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.
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.
220 Stagecraft (3) A practical introduction to the fundamentals of the crafts involved in theatre production at the school, college, and community theatre levels. Two hours of lecture and three arranged hours of laboratory a week.

221 Advanced Stagecrafts (2) The advanced study of the fundamentals of the crafts involved in theatrical production including stage construction, rigging, and automation.

Prerequisite: THEA 220.
223 Costume Technology (3) An introduction to the fundamentals of theatrical costuming with attention given to costume technology and construction.

224 Costume Form and Materials (2) Exploration of the basic forms, materials, and concepts with emphasis on the
three-dimensional human body. The course also employs various media to develop experimental concepts and skills.

225 Theatrical Drafting (2) Design studio emphasizing the basic principles and practices of technical theatre hand- and computer-aided drafting techniques. An introduction to twoand three-dimensional theatrical environments of scenic and light designs.

Prerequisite: permission of the instructor.
Open only to theatre and dance majors.
229 Principles of Stage Makeup (2) An investigation of the principles, techniques, and materials of stage makeup and practical experience in their application.

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.
233 Acting 2 (3) A lecture-laboratory course on the principles of acting with major emphasis on character analysis and development.

Prerequisite: THEA 232.
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.

## 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.
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.
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.

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.
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.
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.
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 272; permission of the department chairperson.

Open only to musical theatre majors and music vocal performance majors.

280 Theatre and Dance Practicum (0-1) 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.

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.

295 (395) 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, 232.
299X Experimental/Developmental Topics (0-12) Topics relevant to the discipline. Course titles to be announced before each semester.

A total of 12 credits may be earned.
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.
318 Advanced Topics in Theatre and Dance (3-6) 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.

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.

320 Theatrical Design Skills (2) A lecture-laboratory class to present basic problem-solving skills involving theatrical design artwork. Emphasizes the development of technique and media competence.

Prerequisite: THEA 220.
321 Rendering for the Theatre (2) Hands-on individual instruction in the processes and techniques of using selected media for the rendering of scenic and costume designs for the theatre.

Prerequisite: THEA 223.
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.

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.
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.

326 Stage Lighting Technology (3) Lecture-laboratory in the basic concepts, materials, hardware, and design principles of stage lighting. Practical laboratory work in stage lighting of university productions.

327 Theatre Sound Technology (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.

328 Voice Lesson (1-2) One private half-hour lesson, and 2hour 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.
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.
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.
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.
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.
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
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.
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.
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.
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.
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.

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.
352 Directing Styles (3) Revolving special topics course with a semester-long focus in the historical, theoretical, and practical understanding of a given directing style. Possible topics include musical theatre, high comedy, classical, and avant-garde.

Prerequisite: THEA 250, permission of the instructor.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.
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.
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.
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.
373 Musical Theatre Scene Study (2) 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.

## 380 Advanced Theatre and Dance Practicum (1-9)

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.
391 Advanced Stage Management (3) Advanced study of all areas of the practice of stage management.

Prerequisite: THEA 291.

## 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 295.
405 Senior Experience (0) An exit class for all graduating seniors that coordinates their transition from undergraduate to professional or preprofessional programs and opportunities in film and theatre. The New York, Los Angeles, and Chicago showcases are coordinated through the senior experience class. Offered credit/no credit only.

Prerequisite: permission of the department chairperson.
Open only to theatre and dance majors.
420 Scene Design (3) Advanced training and experience in the problems of set design and lighting for theatrical productions in many forms and styles, including elements of television design.

Prerequisite: THEA 320.
421 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, 320.
423 Theatre Costume Design (3) Practice in the research, design, and building techniques involved in the preparation of period costumes for use in theatre productions.

Prerequisite: THEA 223, 320.
426 Stage Lighting Design (3) Lecture-laboratory in the basic concepts, materials, hardware, and design principles of stage lighting. Practical laboratory work in stage lighting of university productions.

Prerequisite: THEA 326.
427 Theatre Sound Design (3) Lecture-laboratory in the basic concepts, materials, hardware, and principles of theatrical sound design.

Prerequisite: THEA 327.
429 Makeup and Hair Design for the Theatre (3)
Advanced study of the principles, techniques, and materials for stage makeup and hair design with practical experience in their application.

Prerequisite: THEA 229.
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.

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.
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.
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.
434 Immersion Experience (1-12) 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.

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.

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.

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.
496 Directed Study in Theatre and Dance (1-9) 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.
499 Internships in Theatre and Dance (0-9) 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.

## COLLEGE OF HEALTH

M. Whaley, Dean; J. Kandiah, Associate Dean; T. Mahon, Associate Dean; D. Seabert, 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 <br> 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

$\left.\begin{array}{llll}\text { PREFIX NO } & \text { SHORT TITLE } & \text { CREDITS } \\ \text { Complete one concentration } \\ \text { Concentration 1: } & 15 \text { credits from } \\ \text { CPSY } & 230 & \text { Human Relation Development (3) } \\ 360 & \text { Aspects of Sexuality (3) } \\ 400 & \text { Fundamentals of Counseling (3) } \\ 420 & \text { Psychological Interventions (3) } \\ 470 & \text { Cross-Cult Counseling (3) } \\ 490 & \text { Issues in Counseling (1-6) }\end{array}\right]$

## COUNSELING PSYCHOLOGY (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.

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.

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.

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.

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.

## 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.

490 Issues in Counseling (1-6) 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.

## SCHOOL OF KINESIOLOGY

## T. Weidner, Chairperson

## bsu.edu/kinesiology

The School of Kinesiology offers academic programs in aquatics, athletic training, 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.

## Transfer Students for Bachelor of Athletic Training

Transfer students (students who have earned at least 30 credits at another institution) must complete one semester of Ball State University residency during which time they may apply to the program, if eligible. Transfer students must meet the same program admission criteria as stated above (See Athletic Training Program Application Procedures for details). All required courses in the athletic training major will be evaluated by the Program Coordinator to determine specific transfer course equivalency. Generally, transfer athletic training courses will not meet a specific athletic training course requirement at Ball State University since there is a great degree of variability amongst course content from institution to institution. However, these courses may count as general elective credits toward the total credits ( 120 credits) required for graduation. Due to program requirements, the transfer student must plan to spend a minimum of 5 semesters enrolled in the athletic training professional program once admitted.

## BACHELOR OF ATHLETIC TRAINING (BAT), 73-75 credits

The mission of the Ball State University Athletic Training Program is to provide quality education which will create life-long learners that are committed to delivering high quality patient-centered care within an interdisciplinary health care team. We aspire to develop students who are dedicated to maintaining involvement within the profession through clinical practice and service. Course work and clinical experiences are blended to develop knowledge and skills in evidence-based practice, prevention and health promotion, clinical examination and diagnosis, acute care of injury and illness, therapeutic interventions, psychosocial strategies and referral, health care administration, and professional development and responsibility. Athletic trainers provide care for patients with a variety of skill levels in a variety of settings, including professional, college, or high school sports, sports medicine clinics, industrial settings, government agencies, and performance arts.

## Admission Requirements (Professional Program)

The program has a selective admission process, including but not limited to the following:

- Completion of AT 196, 240, and AQUA 260 (with a $B$ - or better grade in each). Completion of ANAT 201 (with a $C$ or better grade). These courses must be completed or in progress at the time of application.
- Students must complete one academic year (two semesters) at Ball State (one semester for transfer students) with a minimum overall grade-point average of 2.75 at the time of application.
Additional program admission requirements can be found on the Athletic Training Program's website at http://cms.bsu.edu/academics/collegesanddepartments/athleti ctraining/academics/bachelors/admissionreq


## Retention Standards (once admitted to professional program)

Once admitted into the athletic training program, the students' academic and clinical progress will be evaluated
each semester. The guidelines used include, but are not limited to the following:

- Must satisfy (with or without accommodation) the mental, cognitive, emotional, and physical technical standards involved in completing the requirements for program completion.
- Must maintain a minimum overall grade-point average of 2.75 with no semester lower than a 2.5 . A student dropping below this mark will be placed on probation for one semester. Failure to meet this standard after one semester on probation may result in dismissal from the athletic training program.
- Must maintain a minimum grade-point average of 2.75 in the Athletic Training Program (including all major-required courses).
- Students must earn a $C$ or better in all athletic training major courses. Any student who receives a grade lower than a $C$ in any athletic training course will be required to retake the course.
Additional program retention requirements can be found on the Athletic Training Program's website at http://cms.bsu.edu/academics/collegesanddepartments/athleti ctraining/academics/bachelors/admissionreq


## PREFIX NO SHORT TITLE <br> CREDITS

| ANAT | 201 | Fundamentals of Human Anatomy | 3 |
| :--- | :--- | :--- | :--- |
| AQUA | 260 | Emergency Medical Responder | 3 |
| AT | 196 | Intro to Athletic Training | 2 |
|  | 240 | Prevention and Care of Injury | 3 |
|  | 250 | App of Taping in AT | 1 |
|  | 260 | Clinical Education in AT 1 | 2 |
|  | 261 | Clinical Education in AT 2 | 2 |
|  | 360 | Clinical Education in AT 3 | 2 |
|  | 361 | Clinical Education in AT 4 | 2 |
|  | 370 | Lower Ext Ortho Eval in AT | 3 |
|  | 371 | Upper Ext Ortho Eval in AT | 3 |
|  | 372 | Therapeutic Modalities in AT | 3 |
|  | 373 | Therapeutic Exercise in AT | 3 |
|  | 374 | Org and Admin of AT | 3 |
|  | 460 | Clinical Education in AT 5 | 2 |
|  | 461 | Clinical Education in AT 6 | 2 |
|  | 477 | Psych Aspects Spts Medicine | 3 |
|  | 494 | Clinical Integration in AT | 1 |
|  | 495 | Med and Pharm Aspects of AT | 4 |
|  | 497 | Clinical Decision Making in AT | 2 |
| CHEM | 100 | People and Chemistry (3) |  |
|  | or |  |  |
|  | 101 | Gen, Org, Biochem and Hlth Sci (5) |  |
|  | or |  | $3-5$ |
|  | 111 | General Chemistry 1 (4) | 3 |
| EXSC | 201 | Human Perform Concepts Assess | 3 |
|  | 293 | Found Physiology and Exercise | 3 |
|  | 294 | Functional Anatomy | 3 |
|  | 301 | Fund of Exercise Prescription | 3 |

$\begin{array}{llll} & 444 & \text { Sports Nutrition and Wght Ctrl } & 3 \\ \text { PHYS } & 205 & \text { Fund of Hum Phys } & 3\end{array}$
73-75 crs
Recommended electives: AT 496; BIO 111; EXSC 329, 493; HSC 367, 398; NUR 101; PHYC 110; PSYS 241.

## EXERCISE SCIENCE MAJOR IN KINESIOLOGY (BA/BS), 59-87 credits

## Concentration 1: 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.
- 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.

PREFIX NO SHORT TITLE
CREDITS
Pre-EXSC program selection, 20-21 credits

| BIO | 111 | Principles of Biology 1 | 4 |
| :--- | :--- | :--- | :---: |
| CHEM | 101 | Gen, Org, Biochem and Hlth Sci (5) |  |
|  | or |  | $4-5$ |
|  | 111 | General Chemistry 1 (4) | 3 |
| EXSC | 190 | Foundation of Exercise Science | 3 |
|  | 293 | Found Physiology and Exercise |  |
|  | 292 | Anatomy (3) |  |
|  | or |  |  |
| ANAT | 201 | Fundamentals of Human Anatomy (3) | 3 |
| PSYS | 100 | Intro to Psychological Science | 3 |

Exercise science program selection, 24 credits
PEP 250 First Aid
EXSC 147 Resistance Training Leadership 1
201 Human Perform Concepts Assess 3
202 Fitness Assessment in EXSC 3

|  | 294 | Functional Anatomy | 3 |
| :---: | :---: | :---: | :---: |
|  | 301 | Fund of Exercise Prescription | 3 |
|  | 420 | Sports Performance | 3 |
|  | 493 | Advanced Exercise Physiology | 3 |
| NUTR | 340 | Prin of Human Nutrition | 3 |
| Internsh | prequ | rements, 12 credits |  |
| To be e other re standard and sub deadline | gible <br> uired <br> desc <br> itted | or the internship students must ha courses in the major, met all retent bed above, completed 100 observ n application prior to the appropr |  |
| EXSC |  | Exercise Science Internship | 12 |
| Elective | , 15-2 | credits |  |
| Choose | ne of | he following elective concentrati |  |
| Exercise | Scien | e: Basic and Applied Science |  |
| concent | tion, | 5 credits from |  |
| BIO | 112 | Principles of Biology 2 (4) |  |
| CHEM | 112 | General Chemistry 2 (4) |  |
|  | 231 | Organic Chemistry 1 (4) |  |
|  | 232 | Organic Chemistry 2 (4) |  |
|  | 360 | Essentials of Biochemistry (4) |  |
| EXSC | 401 | Prin of Electrocardiogram (3) |  |
|  | 414 | Biomechanics of Human Movem |  |
| NUTR | 444 | Sports Nutrition and Wght Ctrl |  |
| PHYC | 110 | General Physics 1 (4) |  |
|  | 112 | General Physics 2 (4) |  |
| PHYS | 411 | Endocrinology (3) |  |
|  | 413 | Renal Physiology (3) |  |
|  | 414 | Cardiovascular Physiology (3) |  |
| PSYS | 241 | Statistics (3) | 15 |
| Exercise | Scien | : Health and Fitness concentrat |  |
| 16 credi | from |  |  |
| EXSC | 148 | Group Fitness Instructor | 1 |
| 15 credi | from |  |  |
| Fitness | orpor | te Wellness |  |
| AT | 240 | Prevention and Care of Injury (3) |  |
| AQUA | 316 | Aquatic Fitness Instructor (3) |  |
| EXSC | 119 | Hatha Yoga (1) |  |
|  | 360 | Exercise Psychology (3) |  |
|  | 401 | Prin of Electrocardiogram (3) |  |
|  | 414 | Biomechanics of Human Movem |  |
| GERO | 430 | Adaptations in Later Life (3) |  |
|  | 445 | Health Wellness and Aging (3) |  |
| HSC | 462 | Hlth Prmtn in the Worksite (3) |  |
| NUTR | 444 | Sports Nutrition and Wght Ctrl (3) |  |
|  | 448 | Nutrition and Weight Mgmt (3) |  |
| WWIN | 201 | Improving Worker Wellbeing (3) |  |
|  | 405 | Workplace Wellness Coaching ( |  |

Older Adult Fitness/Wellness
AT 240 Prevention and Care of Injury (3)

| AQUA | 316 | Aquatic Fitness Instructor (3) |
| :---: | :---: | :---: |
| EXSC | 119 | Hatha Yoga (1) |
|  | 302 | PA Throughout Lifespan (3) |
|  | 360 | Exercise Psychology (3) |
|  | 414 | Biomechanics of Human Movement (3) |
| GERO | 430 | Adaptations in Later Life (3) |
|  | 445 | Health Wellness and Aging (3) |
| NUTR | 448 | Nutrition and Weight Mgmt (3) |
| WWIN | 201 | Improving Worker Wellbeing (3) |
|  | 405 | Workplace Wellness Coaching (3) |
| Business Management |  |  |
| ISOM | 125 | Micro Apps for Business (3) |
|  | 210 | Business Information Systems (3) |
|  | 251 | Introductory Operations Mgt (3) |
| MGT | 241 | The Entrepreneurial Experience (3) |
|  | 300 | Managing Behavior in Org (3) |
|  | 361 | FDN of HR Employee Relations (3) 15 |
| Exercise Science: Pre-Physical Therapy |  |  |
| concentration, Students take ANAT 201 and CHEM 111 in |  |  |
| pre-major and complete 29-30 credits from |  |  |
| BIO | 112 | Principles of Biology 2 (4) |
| CHEM | 112 | General Chemistry 2 (4) |
| MATH | 181 | Elementary Probability Stats (3) |
|  | or |  |
| PSYS | 241 | Statistics (3) |
| NUR | 101 | Termin Hlth Care Prof and Cons (2) |
|  | or |  |
| CC | 102 | Latin and Greek Terminology (3) |
| PHYC | 110 | General Physics 1 (4) |
|  | 112 | General Physics 2 (4) |
| PHYS | 215 | Human Physiology (5) |
| PSYS | 321 | Developmental Psychology (3) 29-30 |
| Exercise Science: Pre-Occupational Therapy |  |  |
| concentration, Students take ANAT 201 in pre-major and |  |  |
| complete 23-25 credits from |  |  |
| EDPS | 270 | Lifespan Development (3) |
| NUR | 101 | Termin Hlth Care Prof and Cons (2) |
|  | or |  |
| CC | 102 | Latin and Greek Terminology (3) |
| PHYC | 110 | General Physics 1 (4) |
| PHYS | 215 | Human Physiology (5) |
| PSYS | 241 | Statistics (3) |
|  | or |  |
| SOC | 382 | Applied Social Statistics (3) |
|  | or |  |
| HSC | 387 | Quant Mthds and Epid Hlth Pro (3) |
| PSYS | 432 | Abnormal Psychology (3) |
| SOC | 100 | Principles of Sociology (3) 23-25 |

Concentration 2: Aquatics, 59 credits

| PREFIX | NO | SHORT TITLE | CR HRS |
| :---: | :---: | :---: | :---: |
| Core requirements, 15 credits |  |  |  |
| AQUA | 190 | Introduction to Aquatics | 3 |
|  | 479 | Aquatics Internship | 12 |
|  |  |  | 15 crs |
| Required courses, 34 credits |  |  |  |
| AQUA | 216 | Lifeguard Training | 3 |
|  | 260 | Emergency Medical Responder | 3 |
|  | 313 | Biomechanics of Aquatics | 2 |
|  | 315 | Water Safety Instructor (WSI) | 3 |
|  | 316 | Aquatic Fitness Instructor | 3 |
|  | 404 | Lifeguard Instructor (LGI) | 3 |
|  | 454 | Pool Operations and Maint | 3 |
|  | 455 | Aquatic Facilities Management | 3 |
|  | 457 | Aquatic Facility Design | 2 |
|  | 458 | Aquatic Leadership Development | 3 |
| EXSC | 292 | Anatomy | 3 |
|  | 294 | Anatomical Kinesiology | 3 |
|  |  |  | 34 crs |
| Directed electives, 10 credits from |  |  |  |
| AQUA | 120 | Aquatics Special Topics (1-3) |  |
|  | 212 | Aquatic Recreation Activities (3) |  |
|  | 219 | Aquatic Sports Officiating (1) |  |
|  | 220 | Open Water Scuba (2) |  |
|  | 221 | Advanced SCUBA Diver (2) |  |
|  | 224 | Divemaster (2) |  |
|  | 225 | Assistant SCUBA Instructor (2) |  |
|  | 301 | Instructor CPR and First Aid (2) |  |
|  | 314 | Teach Coach Swim and Diving (3) |  |
|  | 456 | Camp Waterfront Administration (2) | ) 10 |

59 crs
Aquatic major students may not earn aquatic minors.

## 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).

- Maintenance 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.
- Maintenance 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.


## PREFIX NO SHORT TITLE CR HRS

ACC 201 Principles of Accounting $1 \quad 3$
BL 260 Principles of Business Law 3
ECON 201 Elementary Microeconomics 3
MGT 300 Managing Behavior in Org 3
MKG 300 Principles of Marketing 3
PEP 409 Psychological Social Issues 3
SPTA 190 Introduction to Sport Admin 3
195 Computer App for Sport Admin 3
290 Revenue Generation in Sport 3
300 Sport Law 3
303 Sport Marketing 3
305 Sport Finance 3
345 Sport Communication 3
402 Sport Event and Facility Mgt 3
448 Sport Governance 3
470 Int and Comp Admin of Sport 3
479 Sport Admin Internship 12
485 Sport Management 3
63 crs

Students must also complete the additional hours from one of the following minors:
Foundations of Business (12 credits)
Foundations of Management ( 12 credits)
Marketing ( 15 credits)
Professional Selling (15 credits)
$75-78 \mathrm{crs}$

## MINOR IN AQUATICS, 18 credits

PREFIX NO SHORT TITLE
CREDITS

Common core, 12 credits
AQUA 190 Introduction to Aquatics 3
216 Lifeguard Training


| AQUA | 220 | Open Water Scuba | 2 |
| :--- | :--- | :--- | :---: |
|  | 221 | Advanced SCUBA Diver | 2 |
|  | 355 | Internship in Aquatics (1-3) | 2 |
|  |  | 18 crs |  |

## MINOR IN WORKPLACE WELLNESS, 20-22 credits

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| WWIN | 201 | Improving Worker Wellbeing | 3 |
|  | 305 | Intro to WW Planning | 3 |
|  | 310 | Workplace Wellness Admin | 3 |
|  | 396 | Civ Engag: Workplc Wellns Prg | 3 |
|  | 397 | Civ Engag: Workplc Wellns Prj | 3 |
|  | 498 | Sr Seminar Workplace Wellness | 1 |
| $4-6$ credits from directed electives |  |  |  |
| COMM | 251 | Bus and Prof Comm (3) |  |
|  | 351 | Organizational Communication (3) |  |
| CPSY | 230 | Human Relation Development (3) |  |
| EDTE | 204 | Sel and Mgt of Tech Resources (3) |  |
| EXSC | 201 | Human Perform Concepts Assess (3) |  |
| HSC | 160 | Fundamentals of Human Health (3) |  |
|  | 180 | Principles of Community Health (3) |  |
|  | 250 | Emergency Health Care (3) |  |
|  | 367 | Drug Dependency and Abuse (3) |  |
|  | 372 | Women and Health (3) |  |
|  | 381 | Stress Management (3) |  |
|  | 482 | Environmental Health (3) |  |
| NUR | 103 | Health Behav: Cult Variations (3) |  |
|  | 201 | Compl and Altern Hlth Mdlities (2) |  |
|  | 299X | Exp and Dev Topics (1-6) |  |
| NUTR | 275 | Personal Nutrition (3) |  |
|  | 340 | Prin of Human Nutrition (3) |  |
| PEP | 250 | First Aid (2) |  |
| PSYS | 213 | Psych of Human Adjustment (3) |  |
|  | 373 | Industrial Psychology (3) |  |
| SOC | 329 | Work and Society (3) |  |
| TDPT | 360 | Industrial Safety and Health (3) |  |
| WWIN | 405 | Workplace Wellness Coaching (3) |  |
|  | 496 | Seminar in Workplace Wellness (1-6) | 1-6) 4-6 |

## TEACHER EDUCATION

Teaching programs require additional courses in educational methods. See the Department of Educational Studies and Teachers College 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 214/215.


## 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, 227, 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, 363, 395 - satisfactory dispositions; $C$ or better.
- HSC 261, 367, and NUTR 240 - C or better.
- PEP 310, 394, 399, 400 satisfactory dispositions; $C$ or better.
- Lesson plan (HSC 295, PEP 394/399).
- 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 (ALL-GRADE) (BA/BS), 92 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| EXSC | 292 | Anatomy | 3 |
|  | 293 | Found Physiology and Exercise | 3 |
| HSC | 160 | Fundamentals of Human Health | 3 |
|  | 261 | Health, Sex, and Family Life | 3 |
|  | 290 | Eval and Assess in Hlth and PE | 3 |
|  | 295 | Rdg Tech Instr Strat in Hlth | 3 |
|  | 363 | Current Issue Admin Coord H PE | 3 |
|  | 367 | Drug Dependency and Abuse | 3 |
|  | 395 | Meths and Curr Tchng Hlth Ed | 3 |
| NUTR | 240 | Nutrition for Educators | 3 |
| PEP | 158 | Teaching Dance and Gymnastics | 2 |
|  | 161 | Found Prin of Health Phys Ed | 3 |
|  | 209 | Intro to Teaching Physical Ed | 3 |
|  | 222 | Field and Court Invasion Games | 2 |
|  | 227 | Intro Adapted Physical Ed Act | 3 |
|  | 232 | Net and Wall Games | 2 |
|  | 252 | Teaching Fitness Activities | 3 |
|  | 291 | Motor Development and Learn | 3 |
|  | 310 | Formal Assess Health Phys Ed | 3 |
|  | 394 | Teaching Phys Educ in Elem Sch | 3 |
|  | 399 | Teaching Phys Ed High Sch | 3 |
|  | 400 | Curr Design in Physical Educ | 2 |
|  | 444 | Developing Health PE Classroom | 3 |

65 crs
Demonstrates competent swimming skills or takes AQUA 214 or 215 . Demonstrates CPR and first aid certification.

## ALL-GRADE EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Professional education sequence, 27 credits |  |  |  |
| EDAL | 470 | Student Teaching: All-Grade (6-7) | 7 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |
|  | 390 | Educational Psychology | 3 |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDSE | 465 | Elective Student Teaching (3 or 5) | 5 |
|  |  |  | 27 crs |
|  |  | $\underline{92 \mathrm{crs}}$ |  |

See Professional Education Assessment/Decision Points, p. 389, for additional information.

## CERTIFICATE IN AQUATICS: INSTRUCTION, 12 credits <br> (See Certificates on page 21.)

CERTIFICATE IN AQUATICS: OPERATIONS, 13 credits
(See Certificates on page 21.)

CERTIFICATE IN AQUATICS: SCUBA LEADERSHIP,
12 credits
(See Certificates on page 21.)

## AQUATICS (AQUA)

120 Aquatics Special Topics/Workshop (1-3) 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.

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.

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.

214 Beginning Swimming (1) Introduces nonswimmers or novices to basic skills and strokes of swimming and diving.

Not open to deep water swimmers.
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.

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.

219 Aquatic Sports Officiating (1) An introduction to the theory and practice of officiating swimming and springboard diving.

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.

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.

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.

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.

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 statesanctioned Emergency Medical Responder course.

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.

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.

## 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.

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.
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.

355 Internship in Aquatics (1-3) 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.
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.

## 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.

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.

456 Camp Waterfront Administration (2) A study in camp specific programming, waterfront safety, design, and administration.

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.

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.

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.

## 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.

## 240 Prevention and Care of Musculoskeletal Injuries (3)

 Introduction to the prevention, recognition, evaluation, treatment, and rehabilitation of common musculoskeletal injuries and conditions. Laboratory experiences emphasize the following: basic injury evaluation and management, preventative stretching techniques, bracing methods, spinal stabilization, splinting, and equipment fitting techniques. A requirement for application to the Athletic Training Program. Lab fee required.
## 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 and 240.
Open only to athletic training majors admitted into the Athletic Training Program.

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 240 and ANAT 201.

Open only to athletic training majors admitted into the Athletic Training Program.

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.

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.

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.

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, AT 240.
Open only to athletic training majors admitted into the Athletic Training Program.

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, AT 240.
Open only to athletic training majors admitted into the Athletic Training Program.

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.

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
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.

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.

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.

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.

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.

## 495 Medical and Pharmacological Aspects of Athletic

 Training (4) Develops the medical and pharmacological knowledge and clinical skills that athletic trainers mustpossess 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.

496 Clinical Experience in Athletic Training (1-6) 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.

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.

## EXERCISE SCIENCE (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.

147 Resistance Training Leadership (1) This course is 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.

Open only to exercise science and athletic training majors.
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.

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.

## 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 and athletic training majors.

## 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.
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.
292 Anatomy (3) Introduction to human anatomy. Provides basic knowledge upon which physiological biomechanical concepts can be built.

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.
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.

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.

## 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.

## 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.

## 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.
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.
401 Principles of the Electrocardiogram (3) Introduction to the basic principles and interpretation of the electrocardiograph (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.
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.
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 201.
Open only to exercise science and athletic training majors.
479 Exercise Science Internship (12) Full-time on- or offcampus 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.
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.

## GERONTOLOGY (GERO)

392 Workshop in Applied Gerontology (1-6) 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 coordinator.

A total of 6 credits may be earned.

## 398 Topical Seminar in Applied Gerontology (1-6)

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.
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.

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.

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.

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.

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.

499 Internship in Gerontology (1-6) 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.

## PHYSICAL EDUCATION: PROFESSIONAL (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.

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.

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.
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 sportappreciation 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.
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.
$\mathbf{2 2 2}$ 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.

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.

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 or by permission of the coordinator.

## 231 Principles and Philosophies of Coaching Sports (3)

The purpose of this course is to engage 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. This course is based on the National Coaching Education Program Standards (NASPE - NCACE - ASEP).

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.

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.

## 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.

## 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.
## 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.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.

> 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.

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.
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.

## 328 Practicum in Adaptive Physical Education 2:

Educational (1) Focuses on an educational setting (community-based schools). Requires fulfilling a sixteenweek practicum assignment under the supervision of an adapted physical educator. Involvement with lesson plans, program development, and evaluation.

Prerequisite: PEP 288.
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: PEP 231.

## 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).

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).

## 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.

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.

## 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.

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.
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 program coordinator.
Open only to sport administration majors and coaching minors.

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. Additional fees required for background check and coaching certification.

Prerequisite: PEP 231, current CPR/first aid/AED certified; permission of the program coordinator.

Open only to accepted coaching minor students.

## 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.

## 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.
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.

## 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.

## 499 Independent Study in Physical Education (1-3) 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.

## PHYSICAL FITNESS/WELLNESS (PFW)

100 Physical Conditioning (2) Designed to develop physical fitness through twice weekly activity sessions. Focuses on a combination of muscular endurance/strength and cardiorespiratory endurance through the use of a variety of equipment commonly found in a commercial fitness facility. 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 101, 102, $103,104,105,117,148,160,161,162,217$.

101 Physical Fitness and Wellness Activity (1) Designed to develop physical fitness through twice weekly aerobic
activity sessions. May select physical conditioning, walking, jogging, aerobics, water aerobics, 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.

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.

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, $102,104,105,117,148,160,161,162,217$.

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, $102,103,105,117,148,160,161,162,217$.

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.
117 Water Aerobics (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.

148 Aerobics (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.

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.

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.

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.

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, $102,103,104,105,117,148,160,161,162$.

## 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.

## 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.
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.

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.

Open only to sport administration majors with full acceptance status.

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.

Open only to sport administration majors with full acceptance status.

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.

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.

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.

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.

Open only to sport administration majors with full acceptance status.

## 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: permission of the program coordinator.
Open only to sport administration majors with full acceptance status.

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.

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.

499 Independent Study in Sport Administration (1-3) 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.

## 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.

## WORKPLACE WELLNESS INTERDISCIPLINARY (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 healthrelated decisions, and other related practices have the potential of influencing worker wellbeing.

## 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.
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.
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.
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.
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.

496 Seminar in Workplace Wellness (1-6) 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.

## 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.

## 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 Active 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. All 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, rappelling, marksmanship, counseling, problem solving, managing resources, military history, and public speaking. Cadets are given opportunities to compete in paintball contests, negotiate through obstacle courses, ride in helicopters (if available), and learn wilderness survival skills. 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 will receive "hands-on" experience under the direct supervision of preceptors-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

Intro to Military Science
Introduction to Leadership
CREDITS

102
201 Leadership and Mili Tactics
202 Leadership and Team Developm
301 Mil Leadership and Opers 1
Mil Leadership and Opers 2
Leadership Chal Goal-Setting
402 Leadershp Chal Goal-Setting
3 credits from

## Approved HIST electives

Additional credits may be earned in MIL 299X and 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.

## 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.
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.
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.

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.
299X Experimental/Developmental Topics (1-6) 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.
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.

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.
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.
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.
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.
499 Independent Study in Military Science (1-3) 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.

Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

## SCHOOL OF NURSING

## L. Siktberg, Director <br> 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.
- 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. A copy of the contract must be submitted by the student to the School of Nursing during the first month of fall semester. 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 all 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 set up for them.

Second Baccalaureate Degree -
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 set up for them (fall admissions only). Second Baccalaureate Degree applicants must have a cumulative GPA of 2.75 or higher.

RN to BS Concentration (for students who are currently RNs)
Minimum Requirements (registered nurse concentration)

- Current unencumbered license as a registered nurse.
- Graduation from an accredited National League for Nursing Accrediting Commission (NLNAC)/Accrediting Commission for Education in Nursing (ACEN) school.

Exception to this criterion:
Grade-point average of 2.75 or better on a 4.0 scale in basic 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.
- Repetition of a required clinical nursing course will be permitted one time and for only one course if the course was not successfully completed.
- 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 Director of the School of Nursing.

An exit assessment must be completed by all majors in the school.

## MAJOR IN NURSING (BS), 86-89 credits

## PREFIX NO SHORT TITLE CREDITS

$C(2.0)$ or better grade required in: ANAT 201; BIO 113; CHEM 101; COMM 210; EDPS 270; HSC 180; NUTR 340; PHYS 215; PSYS 100; SOC 100.

| Support Courses |  |  |  |
| :--- | :--- | :--- | :--- |
| ANAT | 201 | Fundamentals of Human Anatomy | 3 |
| BIO | 113 | Microbiology for Health Sci | 5 |
| CHEM | 101 | Gen, Org, Biochem and Hlth Sci | 5 |
| COMM | 210 | Fundamentals of Public Comm | 3 |
| EDPS | 270 | Lifespan Development | 3 |
| NUTR | 340 | Prin of Human Nutrition | 3 |
| HSC | 180 | Principles of Community Health | 3 |
| PHYS | 215 | Human Physiology | 5 |
| PSYS | 100 | Intro to Psychological Science | 3 |
| SOC | 100 | Principles of Sociology | 3 |
|  | 382 | Applied Social Statistics (3) |  |
|  | or |  |  |
| PSYS | 241 | Statistics (3) |  |
|  | or |  | 3 |
| NUR | 314 | Nursing Statistics (3) | 39 crs |
|  |  |  |  |
|  |  |  | 3 |
| Regular | concentration | 3 |  |
| NUR | 228 | Introduction to Nursing | 3 |
|  | 230 | Hlth Apprais Across Lifespn | 3 |


| 330 | Adlt Hlth 1: Nrs Care Ad Life | 4 |
| :---: | :---: | :---: |
| 340 | Adlt Hlth 2: Nrs Care Ad Life | 4 |
| 350 | Psych-Mentl Hlth Nurs | 4 |
| 370 | Pediatrics | 4 |
| 402 | Adult Health 3 | 4 |
| 404 | Community Health | 4 |
| 406 | Nurs and Childbrng Fams | 4 |
| 423 | Seminar: Transition to Pract | 2 |
| 425 | Leadership and Management | 4 |
| 430 | Adult Health 4 | 4 |
|  |  | 50 crs |
| ed nurse concentration |  |  |
| 302 | Nurs Founds and Issues | 3 |
| 303 | Health Assessment | 3 |
| 322 | Research in Nursing | 3 |
| 401 | Applied Nursing Concepts | 4 |
| 404 | Community Health | 4 |
| 405 | Management and Leadership | 3 |
| and/or authorized departmental credit |  | 27 |

## 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)

102 Diabetes Education for Health Care Consumers (2) Describes the types of diabetes, causes, complications, and management modalities for health care consumers.

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.

## 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.

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.
230 Health Appraisal Across the Lifespan (3) 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. Additional fees may apply.

Prerequisite: ANAT 201; BIO 113; CHEM 101; NUR 228; PSYS 100; 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 students.
231 Fundamental Nursing Skills (3) Introduces scope of professional role development by focusing on selected psychomotor skills in the nursing care of clients in a variety of settings. Additional fees may apply.

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.

## 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. Additional fees may apply.

Prerequisite: ANAT 201; BIO 113; CHEM 101; PHYS
215; PSYS 100; SOC 100; departmental permission.
Open only to LPN students entering baccalaureate nursing program.

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles to be announced before each semester.

A total of 6 credits may be earned.

## 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.

## 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.
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.
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.
304 Health Policy: Issues and Impact (3) Examines current health policy issues: history, contest, and stakeholders. Applies World Health Organization primary health care principles. Reviews decision-making processes. Includes health care delivery and reform issues.

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.
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.

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.
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.

## 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; HSC 180; NUR 230, 231; NUTR 340; 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.

## 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.
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; HSC 180; NUR
230, 231; NUTR 340; 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.
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.
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.
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.

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.

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.
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; statistics; 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.
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. Additional fees may apply.

Prerequisite: HSC 180; NUR 322, 340, 370; PSYS 241 or SOC 382; 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.
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.
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. Additional fees may apply.

Prerequisite: NUR 322, 340, 370; PSYS 241 or SOC
382 or NUR 314; 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.
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.
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.
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.
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.
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.

499 Independent Study (1-4) 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.

## NUTRITION AND HEALTH SCIENCE

## R. Brey, Chairperson <br> bsu.edu/nutrition-health

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 http://cms.bsu.edu/Academics/CollegesandDepartments/Nutrition/AcademicsAdmissions/Undergradudateprograms 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:
- Complete 3 of the 5 .
- Complete within the past seven years or must be retaken.
- Not repeat any math/science course more than one time.
- 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.

PREFIX NO SHORT TITLE
CREDITS
Prerequisite courses, 24 credits

| ANAT | 201 | Fundamentals of Human Anatomy | 3 |
| :--- | :--- | :--- | :--- |
| CHEM | 100 | People and Chemistry | 3 |
| COMM | 210 | Fundamentals of Public Comm | 3 |
| ENG | 103 | Rhetoric and Writing | 3 |


| MATH | 125 | Quantitative Reasoning | 3 | PHYS | 205 | Fund of Hum Phys | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHYC | 100 | Conceptual Physics | 3 |  |  |  |  |
| PHYS | 215 | Human Physiology | 5 | 3 credit | from |  |  |
| PFW |  |  | 1 | CPSY | 230 | Human Relation Development (3) |  |
|  |  |  |  | EDPS | 430 | Mental Health (3) |  |
|  |  |  | 24 crs | GERO | 440 | Women and Aging (3) |  |
|  |  |  |  | HSC | 365 | Health and Aging (3) |  |
| Professional concentration courses, 36 credits |  |  |  |  | 372 | Women and Health (3) |  |
| AHSC | 201 | Introduction to Patient Care | 2 |  | 462 | Hlth Prmtn in the Worksite (3) |  |
|  | 224 | Radiographic Procedures 1 | 3 |  | 368 | Consumer Health Issues (3) |  |
|  | 225 | Radiographic Procedures 2 | 4 | MKG | 310 | Consumer Behavior (3) |  |
|  | 226 | Radiographic Procedures 3 | 2 | NREM | 309 | Human Dimensions Global Change (3) |  |
|  | 227 | Computed Tomography | 1 | POLS | 342 | Problems in Public Policy (3) |  |
|  | 228 | Radiographic Principles 1 | 2 |  | 347 | Environmental Law and Policy (3) |  |
|  | 229 | Radiographic Principles 2 | 3 | PSYS | 324 | Psychology of Women (3) |  |
|  | 230 | Radiographic Principles 3 | 3 | SOC | 424 | Family (3) |  |
|  | 231 | Clinic 1 Radiography | 1 |  | 431 | Aging and the Life Course (3) | 3 |
|  | 232 | Clinic 2 Radiography | 5 |  |  |  |  |
|  | 233 | Clinic 3 Radiography | 6 | 3 credit | from |  |  |
|  | 234 | Clinic 4 Radiography | 4 | ANTH | 311 | Ethnicity and Race (3) |  |
|  |  |  |  |  | 427 | Culture and Medicine (3) |  |
|  |  |  | 36 crs | CPSY | 470 | Cross-Cult Counseling (3) |  |
|  |  |  |  | EDMU | 206 | Adv Ethnic Multicul Grp Beh (3) |  |
|  |  |  | 60 crs | FCFC | 202 | Child and Family Wellness (3) |  |
| Students qualifying for exemption from ENG 103 will receive |  |  |  | NREM | 357 | Internat Community Development (3) |  |
|  |  |  |  | PSYS | 424 | Psychology of Diversity (3) |  |
| credit for the course. ENG 101 and 102 may be substituted for ENG 103. |  |  |  | SOC | 320 | Social Inequality (3) |  |
|  |  |  |  |  | 328 | Global and the Social World (3) |  |
| BACCALAUREATE DEGREES |  |  |  |  | 421 | Racial and Cultural Minor US (3) |  |
|  |  |  |  | WGS | 220 | International Womens Issues (3) | 3 |
| Students will be guided by the outline of baccalaureate degrees (p. 18), the University Core Curriculum (p. 25), and the concentration areas listed below. |  |  |  | 3 credits from |  |  |  |
|  |  |  |  | BIO | 313 | Microbiology (4) |  |
|  |  |  |  | CPSY | 360 | Aspects of Sexuality (3) |  |
|  |  |  |  | EDPS | 350 | Child Psychology (3) |  |
| MAJOR IN HEALTH EDUCATION AND |  |  |  |  | 351 | Adolescent Psychology (3) |  |
| PROMOTION (BA/BS), 69 credits |  |  |  |  | 355 | Adult Psychology (3) |  |
|  |  |  |  | HSC | 261 | Health, Sex, and Family Life (3) |  |
| PREFIX | NO | SHORT TITLE CREDITS |  |  | 371 | Death and Dying (3) |  |
|  |  |  |  |  | 381 | Stress Management (3) |  |
| ANAT | 201 | Fundamentals of Human Anatomy | 3 |  | 464 | Hlth Ed in the Clinical Sttng (3) |  |
| HSC | 160 | Fundamentals of Human Health | 3 |  | 467 | Drug Dependency and Abuse (3) |  |
|  | 180 | Principles of Community Health | 3 | NUTR | 240 | Nutrition for Educators (3) |  |
|  | 200 | Intro to Hlth Ed and Promotion | 3 |  | 275 | Personal Nutrition (3) |  |
|  | 210 | Health Behavior Theories | 3 |  | 340 | Prin of Human Nutrition (3) |  |
|  | 220 | Pop Race Cult in Hlth Promtn | 3 | PSYS | 301 | Health Psychology (3) |  |
|  | 301 | Prog Plan in Hlth Promotion 1 | 3 |  | 377 | Psychology of Sexual Behavior (3) | 3 |
|  | 302 | Prog Plan in Hlth Promotion 2 | 3 |  |  |  |  |
|  | 310 | Healthcare Systems | 3 | 3 credits from |  |  |  |
|  | 344 | Disease Mgt in Hlth Promotion | 3 | CPSY | 400 | Fundamentals of Counseling (3) |  |
|  | 387 | Quant Mthds and Epid Hlth Pro | 3 |  | 420 | Psychological Interventions (3) |  |
|  | 388 | Org Admin in Hlth Promotion | 3 | ECON | 348 | Health and Economics (3) |  |
|  | 479 | Internship | 6 | EMHS | 350 | Haz Mat Health and Safety (3) |  |
|  | 482 | Environmental Health | 3 |  | 351 | Intro Emergency Management (3) |  |
|  | 487 | Applied Res Writ Eval Hlth Pro | 3 | FCFC | 450 | Consumer Education (3) |  |
|  | 494 | Health Communication | 3 |  | 484 | Family Stressors and Crises (3) |  |
|  | 495 | Prof Prep in Hlth Promotion | 3 | NREM | 347 | Occupational Indust Hygiene (3) |  |


| SOC | 341 | Sociology of Hlth and Illness (3) |
| :--- | :--- | :--- |
|  | 433 | Sociology of Mental Health (3) |
| TDPT | 301 | Develop Manage S and H Prog (3) |
|  | 360 | Industrial Safety and Health (3) |
|  |  |  |
| Students are responsible for all elective courses. |  |  |
| MAJOR IN PRE-DIETETICS/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.

## PREFIX NO SHORT TITLE

CREDITS
Pre-dietetics core, 34 credits
ANAT 201 Fundamentals of Human Anatomy 3

CHEM 111 General Chemistry $1 \quad 4$
112 General Chemistry 24
231 Organic Chemistry 4
360 Essentials of Biochemistry 4
FCFN 110 Prin Food Prep and Food Serv 3
NUTR 101 Introduction to Dietetics 1
340 Prin of Human Nutrition 3
PHYS 215 Human Physiology 5
PSYS 100 Intro to Psychological Science 3
Dietetics courses, 62 credits
BIO 113 Microbiology for Health Sci 5
FCFN 147 Foodservice Sanitation 1
220 Meal Design and Presentation 3
NUR 101 Term in Hlth Care Prof and Cons 2
NUTR 345 Macronutrients 3
346 Micronutrients and Phytochem 3
350 Technology of Food Science 3
360 Nutr Cardiometabolic Disease 3
363 Admin of Food and Nutr Systems 3
365 Prof Leadership Nutr Dietetics 3
375 Nutr Assessment Counsel Ed 3
425 Nutrition Counseling Practicum 3
435 Intro Research Nutr Dietetics 3
446 Medical Nutrition Therapy 13

|  | 447 | Medical Nutrition Therapy 2 | 3 |
| :--- | :---: | :--- | :--- |
|  | 455 | Lifecycle Nutrition | 3 |
|  | 456 | Community Nutrition | 3 |
|  | 480 | Global Nutrition | 3 |
| PHIL | 202 | Ethics | 3 |
| PSYS | $241 \quad$ Statistics | 3 |  |
| NUTR | Elective | 3 |  |
|  |  | 96 crs |  |

## MAJOR IN RESPIRATORY THERAPY (BA/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.

PREFIX NO SHORTTITLE CREDITS
Foundation courses

| CHEM | 101 | Gen, Org, Biochem and Hlth Sci | 5 |
| :--- | :--- | :--- | :---: |
| HSC | 160 | Fundamentals of Human Health | 3 |
| PHIL | 202 | Ethics | 3 |
| PHYC | 110 | General Physics 1 | 4 |
| PSYS | 100 | Intro to Psychological Science | 3 |
|  |  |  | 18 crs |

Required prerequisites

| ANAT | 201 | Fundamentals of Human Anatomy | 3 |
| :--- | :--- | :--- | :--- |
| BIO | 113 | Microbiology for Health Sci | 5 |
| MATH | 111 | Pre-Calculus Algebra | 3 |
| PHYS | 215 | Human Physiology | 5 |
| PSYS | 241 | Statistics | 3 |
|  |  | 19 crs |  |

Required AHSC courses, 70 credits
AHSC 303 Intro Hum Diseases Resp Thrpst 2
311 Cardiorespiratory Physiology 3
315 Cardio Assmnt and Patient Care 3
General Respiratory Care4
Care Techniques 12
gy 13
Life Support ..... 3
Respiratory Care Techniques 2 ..... 2
3
Respiratory Care Practicum 1 ..... 3
Neonatal - Pediatric Resp Care ..... 3
Intro Res in Respiratory Care ..... 2
Mgt and Leadership Resp Care ..... 3
Advanced Cardiac Life Support ..... 2Sem Cardiorespiratory Care3
Cardioresp MoniSpec Tech ..... 3
Respiratory Care Practicum 3 ..... 6
Pulmonary Rehab and Geriatrics ..... 3
Patient Ed Tech Resp Thrpsts ..... 36

## MINOR IN PUBLIC HEALTH, 18 credits

Minor is not available to students pursuing a major in health education and promotion.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | ---: | :--- | :---: |
|  |  |  |  |
| HSC | 180 | Principles of Community Health | 3 |
|  | 200 | Intro to Hlth Ed and Promotion | 3 |
|  | 310 | Healthcare Systems | 3 |
| 387 | Quant Mthds and Epid Hlth Pro | 3 |  |
|  | 482 | Environmental Health | 3 |
|  |  |  |  |
| 3 credits from |  |  |  |
| HSC | 261 | Health, Sex, and Family Life (3) |  |
|  | 344 | Disease Mgt in Hlth Promotion (3) |  |
|  | 365 | Health and Aging (3) |  |
| 367 | Drug Dependency and Abuse (3) |  |  |
| 368 | Consumer Health Issues (3) |  |  |
| 371 | Death and Dying (3) |  |  |
| 372 | Women and Health (3) |  |  |
| 381 | Stress Management (3) |  |  |
| 462 | Hlth Prmtn in the Worksite (3) |  |  |
| 464 | Hlth Ed in the Clinical Sttng (3) | 3 |  |
|  |  |  |  |

18 crs
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 and Teachers College 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 214/215.


## 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, 227, 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, 363, 395 - satisfactory dispositions; $C$ or better.
- HSC 261, 367, and FCFN 240 - C or better.
- PEP 310, 394, 399, 400 satisfactory dispositions; $C$ or better.
- Lesson plan (HSC 295, PEP 394/399).
- 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 (ALL-GRADE) (BA/BS), 92 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| EXSC | 292 | Anatomy | 3 |
|  | 293 | Found Physiology and Exercise | 3 |
| HSC | 160 | Fundamentals of Human Health | 3 |
|  | 261 | Health, Sex, and Family Life | 3 |
|  | 290 | Eval and Assess in Hlth and PE | 3 |
|  | 295 | Rdg Tech Instr Strat in Hlth | 3 |
|  | 363 | Current Issue Admin Coord H PE | 3 |
|  | 367 | Drug Dependency and Abuse | 3 |
|  | 395 | Meths and Curr Tchng Hlth Ed | 3 |
| NUTR | 240 | Nutrition for Educators | 3 |
| PEP | 158 | Teaching Dance and Gymnastics | 2 |
|  | 161 | Found Prin of Health Phys Ed | 3 |
|  | 209 | Intro to Teaching Physical Ed | 3 |
|  | 222 | Field and Court Invasion Games | 2 |
|  | 227 | Intro Adapted Physical Ed Act | 3 |
|  | 232 | Net and Wall Games | 2 |
|  | 252 | Teaching Fitness Activities | 3 |
|  | 291 | Motor Development and Learn | 3 |
|  | 310 | Formal Assess Health Phys Ed | 3 |
|  | 394 | Teaching Phys Educ in Elem Sch | 3 |
|  | 399 | Teaching Phys Ed High Sch | 3 |
| 400 | Curr Design in Physical Educ | 2 |  |
|  | 444 | Developing Health PE Classroom | 3 |

65 crs
Demonstrates competent swimming skills or takes AQUA 214 or 215 . Demonstrates CPR and first aid certification.

## ALL-GRADE EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| Professional education sequence, 27 credits |  |  |  |
| EDAL | 470 | Student Teaching: All-Grade (6-7) | 7 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |

$\begin{array}{lll} & 390 & \text { Educational Psychology } 3\end{array}$
EDJH 385 Prin of Tchng in Mid Schl 3
EDSE 465 Elective Student Teaching (3 or 5)

See Professional Education Assessment/Decision Points, p. 389, for additional information.

## 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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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 232.
Parallel: AHSC 226 and 227 and 230.
Open only to radiography students.
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.

298 Special Studies in Medical Imaging (1-3) 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.
299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.

## 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.
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.
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.
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.
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.
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.
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.

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.
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.

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.

## 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 modalitiesPrerequisite: AHSC 325, 326.
Open only to respiratory therapy students.
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.

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, 325.
Open only to respiratory therapy students.
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.
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.
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.
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.
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.

## 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.

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.
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.

## 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.
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.

## FAMILY AND CONSUMER SCIENCES: FOODS AND NUTRITION (FCFN)

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.

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.

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).

210 Customer Service (3) Concentrates on building quality service skills and knowledge needed to foster excellent customer relations.

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: FCFN 110.
222 Advanced Culinary Techniques and Menu Design (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: FCFN 110.
Not open to students who have credit in FCFN 220.
Open only to hospitality and food management majors.
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 and hospitality management minors.

## 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.

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.

## 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: FCFN 147 and 210 and 250 and 376 or 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 program director or department chairperson.

Open only to hospitality and food management majors.
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 and hospitality management minors.

395 Food and Culture (3) Explores the relationships between agricultural practices, diet patterns, food procurement and distribution, nutrition, 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.

Prerequisite: NUTR 240 or 275 or 340.

## 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: FCFN 147 and 220 or 222.
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: FCFN 250.
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: FCFN 147 and 220 or 222.
477 Advanced Event Management (3) Exploration of principles of management relating to special events, meetings, exhibits, catered functions and their intra-industry interaction.

Prerequisite: FCFN 376.
496 Seminar in Foods and Nutrition (1-6) 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.

## HEALTH SCIENCE (HSC)

160 Fundamentals of Human Health (3) Emphasizes lifestyle 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.

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.

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.

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 theorydriven 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 200, or permission of the department chairperson.

## 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 200, or permission of the department chairperson.

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 AT 240 or PEP 250.

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.

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.

## 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.

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 290; or permission of the department chairperson; meet decision point 2 requirements.

Open only to health and physical education teaching majors.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
300 Health Promotion Programming (5) Explores the major components of planning, implementing, and evaluation of health promotion programs.

Prerequisite: HSC 180, 200.
Open only to health science majors and minors.
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 220.

Open only to health education and promotion majors and community health education minors.

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.
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 200; junior status.
344 Disease Management in Health Promotion (3)
Explores current information about infectious and noninfectious diseases from a non-clinical perspective to support the needs of health education programs in a variety of settings.

Prerequisite: HSC 160 and 210 and PHYS 205.
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.

## 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 295 or permission of the department chairperson; meet decision point 2 requirements.

Open only to health and physical education teacher education majors.

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.

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.

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.

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.

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.

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.

## 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: HSC 180 and MATH 108 or 111 or 112 or 125 or 132 or 161 or 162 or 165 or 166 ; junior status.

## 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.
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.

## 390 Honors Colloquium in Health Science (1-4)

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.

## 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, 295, and 363; or permission of the department chairperson; completion of decision point 2.

Open only to health and physical education teacher education majors.

## 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 494 or permission of the department chairperson.

398 Workshop in Health Science (1-6) 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.

462 Health Promotion in the Worksite (3) Explores the major components of planning, implementing, and evaluation of health promotion programs.

Prerequisite: EXSC 301 or HSC 300 or permission of the instructor.

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.
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 EntryLevel Health Education Specialists (NCHEC).

Prerequisite: admission to internship program.
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.
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.
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 301.

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.
498 Special Studies in Health Science (1-6) 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.

## NUTRITION (NUTR)

101 (FCFN 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.
240 (FCFN 240) Nutrition for Educators (3) General principles of nutrition as related to growth, development, and health of the infant, child, adolescent, and adult. Classroom application and integration of strategies.

Not open to students who have credit in NUTR 275 or 340.

275 (FCFN 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.

300 Field Study in Nutrition and Dietetics (3-6) This course explores $21^{\text {st }}$ 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 national and globally are researched and debated for immediate and downstream impacts.

Prerequisite: permission of the Nutrition and Dietetic Program Director is 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.

## 340 (FCFN 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.

345 (FCFN 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.
346 (FCFN 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.
350 (FCFN 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 regulation related to food supply. Review of research and marketing practices of bioengineered food and dietary supplements.

Prerequisite: FCFN 220.
Open only to students admitted into the dietetics program.

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.

## 363 (FCFN 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.
## 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.

## 375 (FCFN 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.
396 (FCFN 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.

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 Nutrition and Health Science chairperson.

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.
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 literate, students will build skills for conducting research and evaluation.

Prerequisite: PSYS 241.
Open only to students admitted to the dietetics program.
444 (FCFN 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.
445 (FCFN 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.
446 (FCFN 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. Prepares students 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.

447 (FCFN 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.

448 (FCFN 448) Nutrition and Weight Management (3) A study of the etiology, pathophysiology, and interdisciplinary treatment 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.
455 (FCFN 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.

456 (FCFN 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.
480 Global Nutrition (3) This course explores $21^{\text {st }}$ 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.

## 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- levels must be completed at Ball State University. Transfer credits are limited to 100and 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 a faculty reference from a SOCW 200 or 250 faculty instructor;
- 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 and in non-social work required courses;
- submitting a completed admission application to the department;
- completing an interview with the Coordinator of Student Services and receiving from this coordinator a positive recommendation for admission to the major;
- declaring any criminal convictions.

2. Upon admission into the social work major, the Coordinator of Student Services assists students in developing a plan of study for completion of the major. The assigned faculty advisor monitors the student's progress academically and professionally.
3. 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, 430, 440, 460, and 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 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, 430, 440;
- to successfully complete the BSW degree program, students must have earned a grade of $C$ or better in SOCW 460 and 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, 460 , and 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 gradepoint average requirements for the major and for the 400 -level courses.

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| SOCW | 100 | Introduction to Social Work | 3 |
|  | 200 | Social Work Practice 1 | 3 |
|  | 220 | Social Welfare Policy 1 | 3 |
|  | 250 | Human Behav and Social Envr 1 | 3 |
|  | 310 | Social Work Practice 2 | 3 |
|  | 320 | Soc Welf Pol and Progs 2 | 3 |
|  | 325 | Human Behav and Social Envr 2 | 3 |
|  | 340 | Research in Social Work 1 | 3 |
|  | 410 | Social Work Practice 3 | 3 |
|  | 430 | Social Work Practice 4 | 3 |
|  | 440 | Research in Social Work 2 | 3 |
|  | 460 | Social Work Practicum | 12 |
|  | 462 | Social Work Practicum Seminar | 3 |
| PSYS | 100 | Intro to Psychological Science | 3 |
|  | 367 | Introduction to Neuroscience (3) |  |
|  | or |  |  |
| BIO | 254 | Biology in the Social Context (3) | 3 |
| SOC | 100 | Principles of Sociology (3) |  |
|  | or |  |  |
|  | 242 | Social Problems (3) | 3 |
| ANTH | 311 | Ethnicity and Race (3) |  |
|  | or |  |  |
| COMM | 290 | Intercultural Communication (3) |  |
|  | or |  |  |
| EDMU | 205 | Intro to Multicul Ed (3) |  |
|  | or |  |  |
| SOC | 421 | Racial and Cultural Minor US (3) | 3 |
| ANTH | 441 | Anthropology of Gender (3) |  |
|  | or |  |  |
| PSYS | 324 | Psychology of Women (3) |  |
|  | or |  |  |
| SOC | 235 | Sociology of Gender (3) |  |
|  | or |  |  |
| WGSSOCW | 210 | Intro Womens and Gender Stud (3) | 3 |
|  | 370 | Sel Aspects of Social Wk Pract (3-6) |  |
|  | or |  |  |

Approved 300- or 400-level university course(s) in a related discipline. A total of 6 credits required of the
major.

## MINOR IN SOCIAL WORK, 18 credits

## PREFIX NO SHORTTITLE CREDITS

SOCW 100 Introduction to Social Work 3
200 Social Work Practice 1
220 Social Welfare Policy 1
250 Human Behav and Social Envr 1
325 Human Behav and Social Envr 2

3 credits from elective (approved 300- or 400-level university course)

## 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.

## 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.

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 socio-cultural 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.

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.

310 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.
320 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.
325 Human Behavior and the Social Environment 2 (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.

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.
370 Selected Aspects of Social Work Practice (3-6)
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.
410 Social Work Practice 3 (3) Introduces methods, knowledge, professional values, and competencies for entrylevel 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.

## 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.
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: SOCW 340; or permission of the
department chairperson.
Open only to social work majors.
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 441 or PSYS 324 or SOC 235 or WGS 210; or permission of the department chairperson.

Open only to social work majors.
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 441 or PSYS 324 or SOC 235 or WGS 210; or permission of the department chairperson.

Open only to social work majors.
490 Independent Study in Social Work (1-3) 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 3 credits may be earned.

## SPEECH PATHOLOGY AND AUDIOLOGY

## M. J. Germani, Chairperson <br> 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 postbaccalaureate 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).

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| BIO | 111 | Principles of Biology 1 | 4 |
| CHEM | 101 | Gen, Org, Biochem and Hlth Sci | 5 |
| HSC | 250 | Emergency Health Care | 3 |
| MATH | 125 | Quantitative Reasoning | 3 |
| PSYS | 100 | Intro to Psychological Science | 3 |
|  | 241 | Statistics | 3 |
| SOC | 100 | Principles of Sociology | 3 |
| SPAA | 100 | Survey of Speech Path and Aud | 2 |
|  | 101 | Clinical Phonetics | 3 |


|  | 260 | Speech Acoustics | 3 |
| :---: | :---: | :---: | :---: |
|  | 270 | Language Development | 3 |
|  | 343 | Introduction to Audiology | 3 |
|  | 344 | Hearing 2 | 3 |
|  | 345 | Clinical Audiology | 3 |
| 3-4 credits from |  |  |  |
| PHYC | 100 | Conceptual Physics (3) |  |
|  | 110 | General Physics 1 (4) | 3-4 |
| 6 credits from |  |  |  |
| Business courses (BL, ECON, MGT, MKG) |  |  | 6 |
| 3 credits from |  |  |  |
| ANAT | 201 | Fundamentals of Human Anatomy (3) |  |
| SPAA | 161 | Anat and Phys of Sp and Hr (3) | 3 |
| 3 credits from |  |  |  |
| PHYS | 205 | Fund of Hum Phys (3) |  |
| PSYS | 412 | Sensation and Perception (3) | 3 |
| 3 credits from |  |  |  |
| CS | 104 | Introduction to Computers (3) |  |
| ISOM | 125 | Micro Apps for Business (3) | 3 |
| 3 credits from |  |  |  |
| SNLN | 251 | American Sign Language 1 (3) |  |
| SPCE | 240 | Hist Ed Deaf Prsns Psych Dfns (3) | 3 |

## MAJOR IN SPEECH-LANGUAGE PATHOLOGY (BA/BS), 62 credits

## Admission requirements

- Admission to the clinical portion (SPAA 311 and 312) of this major is restrictive and selective. To enroll in SPAA 311 and 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 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 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).

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CS | 104 | Introduction to Computers | 3 |
| ENG | 320 | Intro to Linguistics Science | 3 |
| FCFC | 265 | Infant and Toddler Dvlp Educ (3) |  |
|  | or |  | 3 |
|  | 275 | Child Development (3) | 3 |
| PSYS | 100 | Intro to Psychological Science | 3 |
|  | 241 | Statistics | 3 |
|  | 371 | Applied Behavior Analysis | 2 |
| SPAA | 100 | Survey of Speech Path and Aud | 3 |
|  | 101 | Clinical Phonetics | 3 |
|  | 161 | Anat and Phys of Sp and Hr | 3 |
|  | 210 | Speech Sound Disorders | 3 |
|  | 260 | Speech Acoustics | 3 |
|  | 270 | Language Development | 3 |
|  | 311 | Clinical Procedures | 3 |
|  | 312 | Intro to Diagnostics | 3 |
|  | 343 | Introduction to Audiology | 3 |
|  | 344 | Hearing 2 | 3 |
|  | 361 | Neuroanat Spch, Lng, and Hr | 3 |
|  | 371 | Child Language Disorders 1 | 3 |
|  | 418 | Neurogenic Organic Disorders | 3 |
|  | 419 | Clinical Practicum | 3 |
| SPCE | 201 | Intro Stdnts with Except Nds | 62 crs |

## MINOR IN SPEECH PATHOLOGY AND AUDIOLOGY, 24 credits

## PREFIX NO SHORT TITLE CREDITS

| SPAA | 100 | Survey of Speech Path and Aud | 2 |
| :---: | :---: | :--- | :--- |
| 101 | Clinical Phonetics | 3 |  |
| 161 | Anat and Phys of Sp and Hr | 3 |  |
| 210 | Speech Sound Disorders | 3 |  |
| 260 | Speech Acoustics | 3 |  |
| 270 | Language Development | 3 |  |
| 343 | Introduction to Audiology | 3 |  |

4 credits from electives in SPAA

## SPEECH PATHOLOGY AND AUDIOLOGY (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.).

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.

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.

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.
260 Speech Acoustics (3) Introduction to the physical nature of speech and its relationship to speech production and perception.

Prerequisite: SPAA 101.
270 Language Development (3) Overview of language and language development. Consideration of phonology, morphology, syntax, and semantics. Theories of language acquisition. Cultural diversity as related to language.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.
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.
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.

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.
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.

## 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.
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.
371 Child Language Disorders 1 (3) Introduction to the nature, cause, and treatment of language disorders in children.

Prerequisite: SPAA 270.
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.
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.
419 Clinical Practicum (3) Clinical practicum in speechlanguage 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.
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.

492 Directed Study in Speech-Language Pathology and Audiology (1-3) 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.

## HONORS COLLEGE

J. Emert, Dean; P. Lang, Acting 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 bsu.edu/honors.

## REQUIRED HONORS CURRICULUM

## PREFIX NO SHORTTITLE CREDITS

HONR 100 Freshman Seminar 1
189 Inquiries in Global Studies 3
199 Contemp American Civilization 3
201 Inquiries in the Ancient World 3
202 Middle Ages Renaiss Enlightnmt 3
203 Inquiries 19th 20th 21st Cent 3
390 Honors Colloquium 1-6
390 Honors Colloquium 1-6
499 Senior Honors Project 3

3 credits from
HONR 296 Inquiries in Physical Sciences (3)
297 Inquiries in Earth Sciences (3)
298 Inquiries in Life Sciences (3)
3
Two colloquia on different topics are required for HONR 390.

## 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 majorspecific curriculum plans. Offered credit/no credit only.

Open only to freshman Honors College students.
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.

## 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.
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.

## 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.
203 Inquiries in the Nineteenth, Twentieth, and Twentyfirst 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 202.
Open only to Honors College students.
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.
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.
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.
299X Inquiries in Special Topics (0-6) 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.

## 300 Leadership Seminar (0-1) 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.

310 Honors Foreign Study (1-18) 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.

350 Medallion Scholar Special Study (1-15) 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.
369 Honors Professional Experience (1-6) 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.
390 Honors Colloquium (1-6) 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, 199, 201, 202, 203, 296, 297, 298.

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.
450 Medallion Scholar Advanced Study (1-9) 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.
479 Honors Practical Experience (1-6) 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.
490 Independent Study or Research (1-3) 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.
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.

# COLLEGE OF <br> SCIENCES AND HUMANITIES 

M. McCarthy, Dean; S. Johnson, Associate Dean; K. Smith, Interim Associate Dean; C. Chatot, Acting Associate Dean<br>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 70 majors in 17 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

## CERTIFICATE IN HUMANITIES AND <br> ENTREPRENEURSHIP, 51-63 credits

(See Certificates on page 21.)

## CERTIFICATE IN SOCIAL SCIENCES <br> ENTREPRENEURSHIP, 51-107 credits

(See Certificates on page 21.)

## COLLEGE OF SCIENCES AND HUMANITIES (CSHU)

## 299X Experimental/Developmental Topics (1-6) 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.

499X Experimental/Developmental Topics (1-12) 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.

## 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 and Teachers College 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 for the teaching major in chemistry. See the Department of Physics and Astronomy for the teaching major in physics.


92 crs
See Professional Education Assessment/Decision Points, p. 389 , for additional information.

## TEACHING MAJOR IN PHYSICAL SCIENCE (BA/BS), 95-113 credits

This is a four and one-half year program that will meet the physical science (junior high/middle school science and high school chemistry) certification standards of Indiana.

| PREFIX |  | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| Common core, 59 credits |  |  |  |
| ASTR | 120 | The Sun and Stars | 3 |
|  | 121 | Honors Astronomy Laboratory | 1 |
| BIO | 111 | Principles of Biology 1 | 4 |
|  | 112 | Principles of Biology 2 | 4 |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 231 | Organic Chemistry 1 | 4 |
| GEOL | 201 | Earth, Life, and Time | 3 |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
| METC | 230 | Elementary Meteorology | 3 |
| PHYC | 120 | General Physics 1 | 5 |
|  | 122 | General Physics 2 | 5 |
|  | 260 | Introduction to Modern Physics | 4 |
|  | 262 | Modern Physics Laboratory | 1 |
| Research (honors, thesis, internship, or departmen research) |  |  | 3 |
|  |  |  | 59 crs |
| Students must follow the guidelines outlined below. |  |  |  |
| High school chemistry concentration area, 15 credits |  |  |  |
| CHEM | 232 | Organic Chemistry 2 | 4 |
|  |  | Physical Chemistry 1 | 4 |
|  |  | Inorganic Chemistry | 4 |
|  | 463 | Principles of Biochemistry 1 | 3 |
|  |  |  | 15 crs |
|  |  |  | 74 crs |
| Students who currently hold or are pursuing a secondary |  |  |  |
| license in one of the following areas will not be required to complete the high school concentration area: life science, earth/space science, mathematics, chemistry, and physics. |  |  |  |
| This is a four-year program that will meet the high school chemistry, physical science, and physics certification standards of Indiana. |  |  |  |


| Common core, 41 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 231 | Organic Chemistry 1 | 4 |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
| PHYC | 120 | General Physics 1 | 5 |
|  | 122 | General Physics 2 | 5 |
|  | 260 | Introduction to Modern Physics | 4 |
|  | 262 | Modern Physics Laboratory | 1 |
| Research (honors, thesis, internship, or departme research) |  |  | 3 |
|  |  |  | 41 crs |
| Students must follow the guidelines outlined below. |  |  |  |
| High school chemistry concentration area, 15 credits |  |  |  |
| CHEM | 232 | Organic Chemistry 2 | 4 |
|  | 344 | Physical Chemistry 1 | 4 |
|  | 450 | Inorganic Chemistry | 4 |
|  | 463 | Principles of Biochemistry 1 | 3 |
|  |  |  | 15 crs |

Students who currently hold or are pursuing a secondary license in one of the following areas will not be required to complete the high school concentration area: life science, earth/space science, mathematics, chemistry, and physics.

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

PREFIX NO SHORT TITLE
CREDITS

Professional education sequence, 39 credits
EDFO 420 Soc, Hist, Phil Found of Ed 3
EDJH 385 Prin of Tchng in Mid Schl 3
EDMU 205 Intro to Multicul Ed 3
EDPS 251 Development Secondary 3
390 Educational Psychology 3
EDSE 380 Princ of Tchng in Sec School 3
SCI 150 Bsc Con in Science Education 3
295 Intro to the Teaching of Sci 3
396 Using Sci Methods and Mats 3
Student teaching
$95-113 \mathrm{crs}$
See Professional Education Assessment/Decision Points, p. 389 , 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 and Teachers College 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.

## 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.

Political Science: POLS 130 American National Government (3)
Psychology: PSYS 100 Intro to Psychological Science (3) Sociology: $\quad$ SOC 100 Principles of Sociology (3) 12

12 crs

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

Refer to the Department of Educational Studies and Teachers College listings, p. 397, for descriptions of these courses and other professional requirements of the teacher education program.

PREFIX NO SHORT TITLE
CREDITS
Professional education sequence, 42 credits
EDFO 420 Soc, Hist, Phil Found of Ed 3
EDJH 385 Prin of Tchng in Mid Schl 3
EDMU 205 Intro to Multicul Ed 3
EDPS 251 Development Secondary 3
390 Educational Psychology 3
EDSE 320 Read Div Sec Cont Class 3
380 Princ of Tchng in Sec School 3
460 Student Tchng: Sec Schl (6-7) 7
465 Elective Student Teaching (3 or 5) 5
SS 150 Intro Soc Studies Ed-Sec Lev 3
350 Teach Hist SS Jr Hi Mid School 3
395 Teaching SS in Sec Schools 3

Economics: ECON 116 Survey of Economic Ideas (3)

## ANTHROPOLOGY

J. Wies, 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 trips in the United States and 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 anthropology and four specialized concentrations. Concentration 1 is intended for majors interested in a general degree in anthropology that covers cultural anthropology, archaeology, and biological anthropology. Concentration 2 is intended for majors specializing in archaeology including those who will continue their studies in a graduate program or who intend to pursue careers in cultural resource management. Concentration 3 is intended for majors who are interested in applied work in cultural anthropology. Concentration 4 is intended for majors who are interested in biological application within anthropology such as forensics and medical anthropology. All four concentrations prepare students for graduate studies. A concentration for department honors is also available. The department also offers a minor in anthropology.

## MAJOR IN ANTHROPOLOGY (BA/BS), 33-36 credits

PREFIX NO SHORT TITLE CREDITS
Core requirements, 12 credits

| ANTH | 101 | Intro to Cultural Anthropology | 3 |
| :--- | :--- | :--- | :--- |
|  | 103 | Archaeology and Culture | 3 |
|  | 105 | Introduction Biological Anth | 3 |
|  | 401 | Hist Method and Theory in Anth | 3 |

Complete one concentration (in addition to 12 credits
required anthropology core)
Concentration 1: General anthropology, 21 credits
3 credits from methodology
ANTH 204 Fundamentals of Archaeology (3)
242 Folklore and Folklife (3)
407 Applied Anthropology (3)
409 Digital Anthropology (3)
416 Human Osteology (3)
417 Forensic Anthropology (3)
429 Lab Methods in Material Cult (3)
459 Enthographic Methods (3)
463 Theor and Meth Hist Arch (3)
471 Ethnohistory (3) 3
3 credits from cultural anthropology (completed methods course does not count here; ANTH 427 can count as cult or bio elective, but not both)
ANTH 204 Fundamentals of Archaeology (3)
231 Intro Native American Studies (3)
311 Ethnicity and Race (3)
312 Ecological Dims of Culture (3)
321 Social Organization (3)
331 Native Amer of N America (3)
332 Native Amer of Great Lakes (3)
342 Anth of the United States (3)
370 Topics in Old World Cultures (3-6)
380 Topics in New World Cultures (3-6)
407 Applied Anthropology (3)
409 Digital Anthropology (3)

427 Culture and Medicine (3)
441 Anthropology of Gender (3)
451 Witchcraft, Magic, and Relig (3)
452 Anthropology of Technology (3)
460 Special Topics in Cult Anth (3-6)
481 Cult, Econ, and Dev (3)
482 Nat Amer of Amer SW (3)
3 credits from archaeology (completed methods course does not count here)
ANTH 242 Folklore and Folklife (3)
310 Topics in Old World Prehistory (3-6)
343 Hist Arch of Eastern US (3)
364 European Prehistory (3)
420 Topics in New World Arch (3-6)
429 Lab Methods in Material Cult (3)
434 Midwestern Archaeology (3)
457 Applied Archaeology (3)
461 Special Topics in Archaeology (3-6)
463 Theor and Meth Hist Arch (3)
3
3 credits from biological anthropology (completed methods course does not count here; ANTH 427 can count as cult or bio elective but not both)

| ANTH | 315 | Human Paleontology (3) |
| :--- | :--- | :--- |
|  | 405 | Human Biological Variation (3) |
| 406 | Anth Phys Growth and Devlpmnt (3) |  |
| 416 | Human Osteology (3) |  |
| 417 | Forensic Anthropology (3) |  |
| 427 | Culture and Medicine (3) |  |
| 455 | Primatology (3) |  |
| 462 | Special Topics in Bio Anth (3-6) |  |

9 credits of electives from ANTH 300-400 courses (excluding ANTH 440); a minimum of 3 credits must be from Tier 3 courses listed below but no more than 6 credits of a combination of ANTH 369, 445, 450, and 479 may be counted toward the major and only 3 internship credits in ANTH 369 or 479 will count toward the major.
ANTH 445 Archaeological Field School (6)
450 Ethnographic Field School (3-12)
459 Ethnographic Methods (3)
369 Paid Internship in Anth (3)

be from Tier 3 courses listed below. Only 3 internship credits in ANTH 369 or 479 will count towards the major.
ANTH 369 Paid Internship in Anth (3)
450 Ethnographic Field School (3-12)
459 Ethnographic Methods (3)
479 Unpaid Internship in Anth (3)


36 crs
Concentration 4: Biological anthropology, 21 credits
3 credits from methodology (ANTH 427 can only count as methods or cult or bio elective)
ANTH 416 Human Osteology (3)
417 Forensic Anthropology (3)
427 Culture and Medicine (3)
3 credits from cultural anthropology (ANTH 427 can only count as methods or cult or bio elective)
ANTH 231 Intro Native American Studies (3)
242 Folklore and Folklife (3)
311 Ethnicity and Race (3)
312 Ecological Dims of Culture (3)
321 Social Organization (3)
331 Native Amer of N America (3)
332 Native Amer of Great Lakes (3)
342 Anth of the United States (3)
370 Topics in Old World Cultures (3-6)
380 Topics in New World Cultures (3-6)
409 Digital Anthropology (3)
427 Culture and Medicine (3)
441 Anthropology of Gender (3)
451 Witchcraft, Magic, and Relig (3)
460 Special Topics in Cult Anth (3-6)
471 Ethnohistory (3)
481 Cult, Econ, and Dev (3)
482 Nat Amer of Amer SW (3)
3 credits from archaeology
ANTH 204 Fundamentals of Archaeology (3)
310 Topics in Old World Prehistory (3-6)
343 Hist Arch of Eastern US (3)
364 European Prehistory (3)
420 Topics in New World Arch (3-6)
429 Lab Methods in Material Cult (3)
434 Midwestern Archaeology (3-6)
457 Applied Archaeology (3)
461 Special Topics in Archaeology (3-6)
463 Theor and Meth Hist Arch (3)
9 credits from biological anthropology (completed methods course does not count here; ANTH 427 can only count as methods or cult or bio elective)
ANTH 315 Human Paleontology (3)
405 Human Biological Variation (3)
416 Human Osteology (3)
417 Forensic Anthropology (3)

427 Culture and Medicine (3)
455 Primatology (3)
462 Special Topics in Bio Anth (3-6)
3 credits from Tier 3 courses listed below. Only 3 internship credits in ANTH 369 or 479 will count towards the major.

| ANTH | 369 | Paid Internship in Anth (3) |
| :--- | :--- | :--- |
|  | 445 | Archaeological Field School (6) |

450 Ethnographic Filed School (3-12)
459 Ethnographic Methods (3)
479 Unpaid Internship in Anth (3)
$33-36 \mathrm{crs}$

## MINOR IN ANTHROPOLOGY, 18 credits

## PREFIX NO SHORT TITLE

CREDITS
ANTH 101 Intro to Cultural Anthropology 3
3 credits from
ANTH 103
105 Introduction to Biological Anth (3)
204 Fundamentals of Archaeology (3)
12 credits from ANTH electives
18 crs

## 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.

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.

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.

111 Anthropology, Culture, and Globalization (3)
Examines culture and cultural variation in a globalizing
world. It explores how societies and individuals are affected by increasing contact between people of different cultures. It takes an historical and cross-cultural perspective on the human condition and the cultural adaptations necessary to effectively function in a changing world.

204 Fundamentals of Archaeology (3) Introduces the types of data dealt with by archaeology, approaches to data recovery, methods of analysis, and problems of interpretation. Differing problems of traditional research archaeology and modern archaeological resource management are considered.

Prerequisite: ANTH 103 or permission of the instructor.

## 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.

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.

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.
310 Topics in Old World Prehistory (3-6) 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.
311 Ethnicity and Race (3) Explores the concepts of ethnicity and race and how they shape the interaction between individuals and groups in complex society. Devotes particular attention to the Western world, but also considers similar attitudes in other parts of the world.

Prerequisite: ANTH 101 or permission of the instructor.

## 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.

315 Human Paleontology (3) Fossil record of the evolution of humans and their primate predecessors.

Prerequisite: ANTH 105 or permission of the instructor.
321 Social Organization (3) Provides a systematic crosscultural analysis of human organizations from kinship-based societies to modern bureaucracies. Using an evolutionary approach, provides both theoretical perspectives and applied understanding.

Prerequisite: ANTH 101, 111 or permission of the instructor.

## 330 Special Topics in Native American Cultures (3-6)

Detailed analysis of selected contemporary issues facing American Indians-for example, religious freedom, property rights-or a focus on the Indian cultures of a particular area, such as the Southwest, Great Lakes, or Northeast. May be repeated for different topics.

A total of 6 credits may be earned.
331 Native Americans of North America (3) Cultures of the North American Native Americans emphasizing their economic, sociopolitical, and religious institutions.

332 Native Americans of the Great Lakes (3) In-depth study of selected Native American cultures indigenous to the Great Lakes region from the time of European contact to the contemporary period.

Prerequisite: ANTH 101 or permission of the instructor.
342 Anthropology of the United States (3) Examines how the values, beliefs, and norms of different groups of people in the United States are integrated into power structures. Explores how people in the United States experience and resolve cultural tensions between individuals and community, equality, and hierarchy, competition and cooperation.

Prerequisite: ANTH 101 or 111 or permission of the instructor.

## 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.
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.
369 Paid Internship in Anthropology (1-3) 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.
370 Topics in Old World Cultures (3-6) Anthropological survey of the cultural patterns of selected continents or regions, such as East Asia, Europe, or the island Pacific.

Prerequisite: ANTH 101.
A total of 6 credits may be earned.
377 Topics in Museum Operations (3-6) Introduces various aspects of museum operations, such as organization, financing, curation, exhibits, public interpretation, and conservation of collections. Emphasizes ethnographic and archaeological collections. May be repeated for different topics.

A total of 6 credits may be earned.
380 Topics in New World Cultures (3-6) Anthropological survey of the cultural patterns of selected continents or regions, such as the Caribbean or Latin America.

Prerequisite: ANTH 101.
A total of 6 credits may be earned.
390 Honors Colloquium in Anthropology (1-3) Exploration of major issues in modern anthropology. Emphasizes individual study and development of results.

A total of 3 credits may be earned.
Open only to Honors College students.
401 (301) 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.
404 History of Archaeology (3) Development of archaeological thought over the past two centuries focusing on major figures and their contributions.

Prerequisite: ANTH 103.
405 Human Biological Variation (3) Looks at the biological diversity of contemporary human populations from the perspective of evolutionary adaptation, taking into account distribution, inheritance, development, and adaptiveness of observable or measurable traits.

## 406 The Anthropology of Physical Growth and

 Development (3) Children's physical growth and development; its regulation, variation, and assessment in different times and places.Prerequisite: ANTH 105 or permission of the instructor.
407 (307) Applied Anthropology (3) Investigates the problems and work that engage the attention of
anthropologists outside the university setting. Examination of new skills needed to supplement those traditionally taught in anthropology.

Prerequisite: ANTH 101 or permission of the instructor.
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.
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.
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.

420 Topics in New World Archaeology (3-6) Prehistory of various New World regions or developmental periods. Topics will vary from semester to semester-for example, MesoAmerica, the Southwest, general survey. May be repeated for different topics.

Prerequisite recommended: ANTH 103.
A total of 6 credits may be earned.
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.
429 (329) 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 204 or permission of the instructor.

434 (334) 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 204 (or equivalent) or permission of the instructor.

440 Anthropological Field Trip (3-6) Intended to expose students to lifeways of groups outside mainstream society but whose lives and communities are significantly shaped by the policies of the larger society. Can be used for trips in various subfields of anthropology when appropriate.

Prerequisite: permission of the instructor.
A total of 6 credits may be earned.
441 (341) Anthropology of Gender (3) Examines how gender, culture, and power intersect in different places around the globe. Course topics include the politics of reproduction, globalization and migration, violence, popular culture, and intersectionality.

Prerequisite: ANTH 101 or a WGS course or permission of the instructor.

445 Archaeological Field School (6) Designed to provide practical application of archaeological methods, techniques, and strategies in a field setting. Participation in a supervised investigation of a formal archaeological problem at an actual archaeological site or at an experimental site.

Prerequisite: permission of the instructor.
450 Ethnographic Field School (3-12) 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 12 credits may be earned.
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.
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.

455 Primatology (3) Comparative survey of nonhuman primates, their biology and behavior.

Prerequisite: ANTH 105 or permission of the instructor.

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 204 or permission of the instructor.
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.

## 460 Special Topics in Cultural Anthropology (3-6)

Detailed analysis of a special problem in cultural anthropology such as culture and global warming, anthropology and architecture, urban anthropology, or anthropology and food. May be repeated for different topics.

Prerequisite: ANTH 101 or permission of the instructor.
A total of 6 credits may be earned.
461 Special Topics in Archeology (3-6) Detailed analysis of a special problem in archaeology such as lithic analysis or science in archeology. May be repeated for different topics.

Prerequisite: ANTH 103 or permission of the instructor.
A total of 6 credits may be earned.
462 Special Topics in Biological Anthropology (3-6)
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.
463 Theory and Method in Historical Archaeology (3)
Presents 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.
471 Ethnohistory (3) Methods and theories of ethnohistory introduced by emphasizing how culture and history intersect with race, ethnicity, gender, class, and sexuality; a researchintensive class.

Prerequisite: ANTH 101 or permission of the instructor.
479 Unpaid Internship (1-3) 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.

481 Culture, Economy, and Development (3) Concerned with a culturally embedded view of allocation, conversion, production, distribution, and consumption of resources. Emphasizes economic development in third and fourth world countries both from theoretical and applied perspectives.

## 482 Native Americans of the American Southwest (3)

 Surveys prehistoric, historic, and contemporary cultures of selected Southwest Native American groups. Emphasizes culture-specific solutions to problems perceived in their relationship to their natural and social environments.490 Independent Study in Anthropology (1-3) 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.

## BIOLOGY

## K. Badger, Chairperson <br> 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 sustainabile management of aquatic and terrestrial ecosystems. Further information about careers for biology majors can be found on our departmental Web site 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. Preprofessional 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 in the College of Sciences and Humanities.)

Students interested in pursuing graduate work in a biological science should be aware that graduate schools generally require the following:

- proficiency in at least one foreign language, computer science, or statistics;
- chemistry through the organic sequence; biochemistry recommended;
- one year of college physics; and
- mathematics through the calculus sequence.

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, 112, 210, 214, 215, 216, 315 or 316 , and 499 .
Students should refer to the individual Concentrations regarding any course limitations relevant to courses in the specific Concentrations.

PREFIX NO SHORT TITLE
CREDITS

| Common core, 47-48 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| BIO | 111 | Principles of Biology 1 | 4 |
|  | 112 | Principles of Biology 2 | 4 |
|  | 210 | Introduction to Botany | 3 |
|  | 214 | Genetics | 4 |
|  | 215 | Cell Biology | 3 |
|  | 216 | Ecology | 3 |
|  | 315 | Methods in Cell Biology (2) |  |
|  | or |  |  |
|  | 316 | Methods in Ecology (2) | 2 |
|  | 499 | Symposium | 1 |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 231 | Organic Chemistry 1 | 4 |
| MATH | 108 | Intermediate Algebra | 3 |
|  | 112 | Precalculus Trigonometry (3) |  |
|  | or |  |  |
|  | 161 | Applied Calculus 1 (3) |  |
|  | or |  |  |
|  | 165 | Calculus 1 (4) | 3-4 |
| PHYC | 110 | General Physics 1 | 4 |

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.
$18-24 \mathrm{crs}$
$65-74 \mathrm{crs}$

Concentration 2: Wildlife biology and conservation, 25-26 credits

| BIO | 448 | Biometry | 3 |
| :--- | :--- | :--- | :---: |
| BOT | 380 | Forestry | 3 |
|  | 440 | Taxonomy of Vascular Plants | 4 |
|  | 470 | Dendrology (3) |  |
|  | or |  | $3-4$ |
|  | 481 | Aquatic Botany (4) | 3 |
| GEOG | 265 | Intro Geographic Info Systems | 3 |
| ZOOL | 440 | Ornithology | 3 |
|  | 446 | Mammalogy | 3 |
|  | 483 | Wildlife Biology |  |

$72-74 \mathrm{crs}$
Concentration 3: Aquatic biology and fisheries, 22-23 credits
BIO 448 Biometry 3
480 Limnology 3
BOT 481 Aquatic Botany (4)

|  | or |  |  |
| :--- | :--- | :--- | :---: |
| ZOOL | 465 | Fishery Resources Management (3) | $3-4$ |
|  | 432 | Invertebrate Zoology | 4 |
|  | 444 | Ichthyology | 3 |
|  | 484 | Aquatic Entomology | 3 |
| MATH | 161 | Applied Calculus 1 | 3 |
|  |  |  | $69-71 \mathrm{crs}$ |

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
BIO 313 Microbiology 4
341 Pathogenic Bacteriology 3
444 Immunology 4
446 Applied Microbiology 3
BOT 446 Medical Mycology 3
CHEM 360 Essentials of Biochemistry 4
5 credits from 200-400 level BIO, BIOT, BOT or ZOOL 5
$73-74 \mathrm{crs}$

## 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.
BIO 448 Biometry 3
452 Advanced Genetics 3
453 Human Genetic Problem Humanity 3
454 Genomes: Genomics Proteomics 3
457 Molecular Biology 4
5 credits from 200-400 level BIO, BIOT, BOT, or ZOOL 5

$$
68-69 \mathrm{crs}
$$

Concentration 6: Cellular and molecular biology, 25 credits
BIO 313 Microbiology 4

444 Immunology 4
457 Molecular Biology 4
470 Developmental Biology 4
CHEM 360 Essentials of Biochemistry (4)
or
463 Principles of Biochemistry 1 (3)
and
465 Biochemistry Lab Techniques (1)
4
5 credits from
BIO 369 Internship in Biology (1-6)
394 Practicum in Biology (1-3)
456 Cancer Biology (3)
498 Undergraduate Research (1-3)
BIOT (any 2 BIOT classes, except BIOT 493)

| BOT <br> CHEM | 451 | Plant Physiology (4) |  |
| :---: | :---: | :---: | :---: |
|  | 464 | Principles of Biochemistry 2 (3) | 5 |
| 72-73 crs |  |  |  |
| Recommended electives are BIO 341, 446, 452, 453, 460, 482; BIOT 493; BOT 446; MATH 162 or 166 ; PHYC 112 or 122; or SCI 501. |  |  |  |
| Concentration 7: Field botany, 23 credits |  |  |  |
| BIO | 448 | Biometry | 3 |
| BOT | 380 | Forestry | 3 |
|  | 440 | Taxonomy of Vascular Plants | 4 |
|  | 470 | Dendrology | 3 |
|  | 480 | Plant Ecology | 3 |
|  | 481 | Aquatic Botany | 4 |
| NREM | 221 | Soil Resources | 3 |
|  |  |  | $70-71 \mathrm{crs}$ |
| Concentration 8: Zoology, 21-22 credits |  |  |  |
| ZOOL | 330 | Struct and Dev of Vertebrates | 5 |
|  | 432 | Invertebrate Zoology | 4 |
| 12-13 credits from |  |  |  |
| At least 9 credits must be taken from ZOOL |  |  |  |
| BIO | 448 | Biometry (3) |  |
| CHEM | 360 | Essentials of Biochemistry (4) |  |
| ZOOL | 347 | Animal Parasitology (3) |  |
|  | 440 | Ornithology (3) |  |
|  | 441 | Entomology (3) |  |
|  | 444 | Ichthyology (3) |  |
|  | 445 | Herpetology (3) |  |
|  | 446 | Mammalogy (3) |  |
|  | 484 | Aquatic Entomology (3) | 12-13 |
|  |  |  | 68-70 crs |
|  |  |  | 65-74 crs |

## TEACHER EDUCATION

## SCIENCE TEACHING MAJORS

(See Science, College of Sciences and Humanities, p. 259, for the teaching major in life science.)

## MAJOR IN MEDICAL TECHNOLOGY

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), 51 credits

Recommended electives are BIO 112, 214, 215; PHYC 110; and MGT 300.

PREFIX NO SHORT TITLE CREDITS

| ANAT | 201 | Fundamentals of Human Anatomy | 3 |
| :--- | :--- | :--- | :--- |
| BIO | 111 | Principles of Biology 1 | 4 |
|  | 313 | Microbiology | 4 |
|  | 341 | Pathogenic Bacteriology | 3 |
|  | 444 | Immunology | 4 |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 231 | Organic Chemistry 1 | 4 |
|  | 325 | Instrument Meths of Analy | 3 |
|  | 360 | Essentials of Biochemistry | 4 |
| MATH | 108 | Intermediate Algebra | 3 |
| PHYS | 215 | Human Physiology | 5 |
| ZOOL | 347 | Animal Parasitology | 3 |
|  |  |  | 51 crs |

## PREDENTAL PREPARATION

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 94 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 (32 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 credit in two semesters of English, including one semester of composition; one semester of interpersonal communication (COMM 210 or 240 is recommended); one semester of introductory psychology; one semester of physiology; and biochemistry (CHEM 360 is recommended). The following courses are recommended for elective credit: BIO 215, 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.

## MAJOR IN PREDENTAL PREPARATION (BA/BS), 37 credits

| PREFIX | NO | SHORT TITLE |
| :--- | :--- | :--- |
|  |  |  |
| BIO | 111 | Principles of Biology 1 |
|  | 112 | Principles of Biology 2 |
|  | 214 | Genetics |
| CHEM | 111 | General Chemistry 1 |
|  | 112 | General Chemistry 2 |
|  | 231 | Organic Chemistry 1 |
| PHYC | 110 | General Physics 1 |
|  | 112 | General Physics 2 |
| ZOOL | 330 | Struct and Dev of Vertebrates |

CREDITS

37 crs

## PREMEDICAL PREPARATION

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, 215, 313,444 ; ANAT 201 and PHYS 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.

## MAJOR IN PREMEDICAL PREPARATION (BA/BS), $\mathbf{5 0 - 5 4}$ credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| BIO | 111 | Principles of Biology 1 | 4 |
|  | 112 | Principles of Biology 2 | 4 |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 231 | Organic Chemistry 1 (4) |  |
|  | 232 | Organic Chemistry 2 (4) |  |
|  | or |  |  |
|  | 234 | Organic Chemistry 1 (5) | $8-10$ |
|  | 235 | Organic Chemistry 2 (5) |  |
|  | 360 | Essentials of Biochemistry (4) |  |
|  | or |  |  |
|  | 463 | Principles of Biochemistry 1 (3) |  |
|  | and |  | $4-6$ |
| PHYC | 464 | Principles of Biochemistry 2 (3) | 4 |
|  | 110 | General Physics 1 | 4 |
| PSYS | 112 | General Physics 2 | 3 |
| SOC | 100 | Intro to Psychological Science | 3 |
| ZOOL | 330 | Principles of Sociology | 3 |
|  |  |  | $50-54 \mathrm{crs}$ |

## 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-PREOPTOMETRYPREDENTAL HYGIENE-PREPHYSICIAN'S ASSISTANT—PRECHIROPRACTIC

Courses are offered that fulfill requirements for those students who are planning to apply for admission to schools of veterinary medicine, optometry, dental hygiene, physician's assistant, and prechiropractic. Preprofessional counseling for these programs is available in the Department of Biology.

## MINOR IN BIOLOGY, 19-20 credits

## PREFIX NO SHORT TITLE

CREDITS
Students planning to minor in biology should choose 200level courses which fulfill prerequisites for 300- and 400level courses in the minor. The 300- and 400-level courses should be chosen from the concentrations listed for biology majors. BIO 369,394 , and 498 do not count in the minor. Minors may choose only one area of emphasis.

Choose one group
$\begin{array}{lll}\text { BIO } & 111 & \text { Principles of Biology } 1 \text { (4) } \\ & 112 & \text { Principles of Biology } 2 \text { (4) }\end{array}$


## MINOR IN PHYSIOLOGY, 20-21 credits

PREFIX NO SHORT TITLE CREDITS
ANAT 201 Fundamentals of Human Anatomy 3
PHYS 215 Human Physiology 5
12-13 credits from

| ANAT | 425 | Human Embryology and Histology (4) |
| :--- | :--- | :--- |
| PHYS | 411 | Endocrinology (3) |
|  | 413 | Renal Physiology (3) |
|  | 414 | Cardiovascular Physiology (3) |
|  | 420 | Neuroscience (3) |

20-21 crs
BIO 111 and one chemistry course are prerequisites to this program.

## CERTIFICATE IN BIOTECHNOLOGY, 20-26 credits (See Certificates on page 21.)

## 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.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

490 Special Studies in Anatomy (1-3) 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.

## 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.

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.

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.

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)

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)

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.
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.
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.
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.
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.
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.

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced each semester.

A total of 6 credits may be earned.
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.
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.
316 (217) 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.
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.
369 Internship in Biology (1-6) 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.

390 Honors Colloquium in Biology (1-2) 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.

394 Practicum in Biology (1-3) 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.
401 Developments in Modern Biology (3-6) 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.

416 Population Ecology (3) Presents fundamental principles of population growth and regulation, including both withinspecies 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.
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.
419 Biogeography (3) Understanding of principles of biogeography including plant and animal distributions.

Prerequisite: BIO 111 and 112 or permission of the department chairperson.

420 Field Biology of Distant Areas (3-12) 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.
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.

444 (344) 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.
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.

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.

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.
453 Human Genetics and the Problems of Humanity (3)
Current problems in human heredity. Human chromosome aberrations. DNA, the genetic code, and mutations. Consanguineous marriages and genetic defects. Mendelian principles applied to humans. Pedigrees and probability. Genetic screening and counseling. Social, ethical, and legal problems and advances in genetics.

Prerequisite: BIO 214; or permission of the instructor or department chairperson.

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.

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.
457 Molecular Biology (4) Structure and function of macromolecules in living things. Emphasizes threedimensional 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.

## 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.

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.

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.

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.
483 Marine Biology (3) Introduction to marine environments. Properties of seawater, hydrodynamics.

Phytoplankton and benthic plants. Primary production, nutrient cycles. Marine animals, surveys of major taxa. Adaptations for life on the bottom, open water, intertidal zones, estuaries, and abyssal regions.

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.

498 Undergraduate Research (1-3) 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.
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 identify. 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.

## 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.

## 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.
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.

## 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.

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.
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.
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.

## 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.

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.
442 Economic Botany (3) The cultivation, processing, environmental requirements, and use of plants and plant derivatives for food, drugs, dwellings, clothing, and power.

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.
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.
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.

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.
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.

## MEDICAL TECHNOLOGY (MEDT)

401 Urinalysis (1-10) 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.

402 Serology (1-10) Principles of immunology. Histology and biochemistry of the immune system. Theory and practice of the detection of antibodies and other serum substances related to disease conditions using various diagnostic procedures.

Prerequisite: BIO 444.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

403 Microbiology (1-10) 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, 444.
A total of 10 credits may be earned.
Open only to medical technology students in the clinical year.

404 Blood Bank (1-10) 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.

405 Special Topics in Medical Technology (1-10) 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.

406 Medical Chemistry (1-10) 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.

407 Hematology (1-10) 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.

408 Clinical Practicum (1-10) Includes rotations throughout all areas of the clinical laboratory following all pertinent didactic courses. Students learn time management, multitasking 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.

## 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.

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.
299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.
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.

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.

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.

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.

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.

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.

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.
490 Special Studies in Physiology (1-3) 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.

## SCIENCE (SCI)

150 Basic Concepts in Science Education (3) Serves as an introduction to all secondary science teaching programs. Content includes constructing an integrated vision about what it means to teach and learn science, investigating the nature of scientific inquiry, developing basic science teaching skills and dispositions, and beginning preparation for teacher licensure.

Prerequisite or parallel: a science course from the science licensure area.

Open only to secondary science teaching majors (all science license areas.)

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.

## 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.

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 selection, equipment inventories, and teaching on a science budget.

Prerequisite: SCI 295.
Parallel: EDJH 385; EDSE 380.
Open only to teaching majors in life science, physical science, or earth/space science.

## 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.

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 pre-school and primary children. Designed for early childhood education programs.

Prerequisite: 8 credits of science or permission of the department chairperson.

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.

## 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.
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.
432 Invertebrate Zoology (4) Comparative morphology, physiology, ecology, life histories, and phylogeny of invertebrate animal phyla.

Prerequisite: BIO 216.
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.

441 Entomology (3) Anatomy, physiology, taxonomy, life histories, habits, and adaptations of insects.

Prerequisite: BIO 111 and 112 or permission of the instructor.

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.
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.
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.

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.

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.

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.

## 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; a teaching major in chemistry; and a teaching major in physical science for the preparation of secondary school teachers (see Science under Interdepartmental Programs in the College of Sciences and Humanities).

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 predental, pre-engineering, prepharmacy, premedical, 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

## PREFIX NO SHORT TITLE

General education, 23-27 credits

| COMM | 210 | Fundamentals of Public Comm | 3 |
| :--- | :--- | :--- | :--- |
| ECON | 201 | Elementary Microeconomics (3) |  |
|  | or |  |  |
|  | 202 | Elementary Macroeconomics (3) | 3 |
| ENG | 103 | Rhetoric and Writing | 3 |
|  | 104 | Composing Research | 3 |

6 credits from
TMFG 161 Intro Manufacturing Industries (3)
225 Industrial Plastics (3)
or
other approved courses

PFW 1
Electives

Chemistry concentration area, 33-37 credits
CHEM 111 General Chemistry $1 \quad 4$
112 General Chemistry 24
225 Chemical Analysis 3
234 Organic Chemistry 1 (5)
235 Organic Chemistry 2 (5)
or
231 Organic Chemistry 1 (4)
232 Organic Chemistry 2 (4)
325 Instrument Meths of Analy 3
4 credits from CHEM electives (including CHEM 389, unless waived by advisor)

3-4 credits from
MATH $111 \quad$ Pre-Calculus Algebra (3)

| MATH | 111 | Pre-Calculus Algebra (3) |  |
| :---: | :---: | :---: | :---: |
|  | 112 | Precalculus Trigonometry (3) |  |
|  | 161 | Applied Calculus 1 (3) |  |
|  | 165 | Calculus 1 (4) | 3-4 |
| $4-5$ credits from |  |  |  |
| PHYC | 110 | General Physics 1 (4) |  |
|  | or |  |  |
|  | 120 | General Physics 1 (5) | 4-5 |
|  |  |  | $33-37 \mathrm{crs}$ |

Students qualifying for exemption from ENG 103 or 104 will receive credit for the course(s). ENG 101 and 102 may be substituted for ENG 103.

## BACCALAUREATE DEGREES

Students will be guided by the outline of baccalaureate degrees (p. 18), the University Core Curriculum (p. 25), and the concentration areas listed below.

## MAJOR IN CHEMISTRY (BA/BS), 59-64 credit concentration

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.

Other requirements

| MATH | 111 | Pre-Calculus Algebra (3) |  |
| :--- | :--- | :--- | ---: |
|  | 165 | Calculus 1 (4) |  |
|  | 166 | Calculus 2 (4) | $8-11$ |
| PHYC | 120 | General Physics 1 (5) |  |
|  | 122 | General Physics 2 (5) |  |
|  | or |  | $8-10$ |
|  | 110 | General Physics 1 (4) | - |
|  | 112 | General Physics 2 (4) | $59-64 \mathrm{crs}$ |

Additional credits in CHEM 470, Independent Study and Research, are recommended.

## MAJOR IN CHEMISTRY (BA/BS), 50-55 credit concentration

PREFIX NO SHORT TITLE
CREDITS

112 General Chemistry 24
225 Chemical Analysis 3
234 Organic Chemistry 1 (5)
235 Organic Chemistry 2 (5)
or
231 Organic Chemistry 1 (4)
232 Organic Chemistry 2 (4) 8-10
344 Physical Chemistry $1 \quad 4$
345 Physical Chemistry $2 \quad 4$
400 Chemical Communications 1

3-4 credits from
CHEM 420 Chemical Instrumentation 1 (3)
450 Inorganic Chemistry (4)
463 Principles of Biochemistry 1 (3)
465 Biochemistry Lab Techniques (1) 3-4
0-3 credits from approved 300- or 400-level CHEM courses

Other requirements
MATH 111 Pre-Calculus Algebra (3)
165 Calculus 1 (4)
166 Calculus 2 (4)
PHYC 120 General Physics 1 (5)
122 General Physics 2 (5)
or
110 General Physics 1 (4)
112 General Physics 2 (4)

Additional credits in CHEM 470, Independent Study and Research, are recommended.

## MAJOR IN CHEMISTRY, BIOCHEMISTRY (BA/BS), 63-70 credit concentration

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 234 | Organic Chemistry 1 (5) |  |
|  | 235 | Organic Chemistry 2 (5) |  |
|  | or |  |  |
|  | 231 | Organic Chemistry 1 (4) |  |
|  | 232 | Organic Chemistry 2 (4) | 8-10 |
|  | 344 | Physical Chemistry 1 | 4 |
|  | 345 | Physical Chemistry 2 | 4 |
|  | 400 | Chemical Communications | 1 |
|  | 463 | Principles of Biochemistry 1 | 3 |
|  | 464 | Principles of Biochemistry 2 | 3 |
|  | 465 | Biochemistry Lab Techniques | 1 |
|  |  |  | $35-37 \mathrm{crs}$ |
| Other requirements |  |  |  |
| BIO | 111 | Principles of Biology 1 | 4 |
|  | 215 | Cell Biology | 3 |
|  | 457 | Molecular Biology | 4 |
| MATH | 111 | Pre-Calculus Algebra (3) |  |
|  | 165 | Calculus 1 (4) |  |
|  | 166 | Calculus 2 (4) | 8-11 |
| PHYC | 120 | General Physics 1 (5) |  |
|  | 122 | General Physics 2 (5) |  |
|  | or |  |  |
|  | 110 | General Physics 1 (4) |  |
|  | 112 | General Physics 2 (4) | 8-10 |

$63-70 \mathrm{crs}$
Additional credits from BIO 112 and 400 -level chemistry courses such as CHEM 470, Independent Study and Research, are recommended.

## MINOR IN CHEMISTRY, 22 credits

High school mathematics equivalent to MATH 108 is required.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 231 | Organic Chemistry 1 | 4 |

7 credits from approved electives in CHEM

## 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 and Teachers College for descriptions of these courses and other professional requirements of the teacher education program.

TEACHING MAJOR IN CHEMISTRY (BA/BS), 88-92 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
|  | 225 | Chemical Analysis | 3 |
|  | 234 | Organic Chemistry 1 (5) |  |
|  | 235 | Organic Chemistry 2 (5) |  |
|  | or |  | $8-10$ |
|  | 231 | Organic Chemistry 1 (4) | 4 |
|  | 232 | Organic Chemistry 2 (4) | 4 |
|  | 344 | Physical Chemistry 1 | 3 |
|  | 450 | Inorganic Chemistry | 4 |
|  | 463 | Principles of Biochemistry 1 | 4 |
| MATH | 165 | Calculus 1 |  |
|  | 166 | Calculus 2 |  |
| PHYC | 120 | General Physics 1 (5) |  |
|  | 122 | General Physics 2 (5) | $8-10$ |
|  | or |  |  |
|  | 110 | General Physics 1 (4) |  |
|  | 112 | General Physics 2 (4) |  |
| 3 |  |  |  |

$49-53 \mathrm{crs}$

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

PREFIX NO SHORT TITLE CREDITS

| Professional education sequence, 39 credits |  |  |  |
| :--- | :--- | :--- | :--- |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 380 | Princ of Tchng in Sec School | 3 |
| SCI | 150 | Bsc Con in Science Education | 3 |
|  | 295 | Intro to the Teaching of Sci | 3 |

396 Using Sci Methods and Mats

Student teaching | 3 |
| :---: |
|  |

See Professional Education Assessment/Decision Points, p. 389 , for additional information.

## 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, 111.

## 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-hour recitation-laboratory weekly. Core Transfer Library: Physical Sciences (IPS 1723)Not open to students who have credit in CHEM 111.
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.

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 111.

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: one year of secondary school algebra or the equivalent.

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 111 or 112 or 161 or 162 or 165 or 166 or equivalent math placement scores.

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.

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.
231 Organic Chemistry 1 (4) Nomenclature, structure, bonding, and functional group chemistry of organic compounds. Three hours of lecture and one three-hour laboratory period weekly.

Prerequisite: CHEM 112.
Not open to students who have credit in CHEM 234.
232 Organic Chemistry 2 (4) Continuation and extension of CHEM 231, including the chemistry of natural products and biomolecules. Three hours of lecture and one three-hour laboratory period weekly.

Prerequisite: CHEM 231.
Not open to students who have credit in CHEM 235.
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.
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.
299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

## 340 Selected Principles of Physical Chemistry (3)

Introduction to the properties of solids, liquids, gases, and solutions and to the basic concepts of thermodynamics and kinetics. Especially for premedical, biology, and general science majors, chemistry teaching majors, and chemistry minors. Three hours of lecture and one one-hour recitation/laboratory period weekly.

Prerequisite: CHEM 225; MATH 161.
Not open to students who have credit in CHEM 344.
344 Physical Chemistry 1 (4) Thermodynamic and structural description of chemical processes and properties of solids, liquids, gases, and solutions. Three hours of lecture and one three-hour laboratory period weekly.

Prerequisite: CHEM 232 or 235; MATH 166; one year of college physics.

345 Physical Chemistry 2 (4) Continuation and extension of CHEM 344. Topics include reaction kinetics, theoretical aspects of quantum mechanics, and spectroscopy. Three hours of lecture and one three-hour laboratory period weekly. Prerequisite: CHEM 344.

360 Essentials of Biochemistry (4) Organic chemistry of carboxylic acids, amines, and their derivatives; biochemistry of proteins, carbohydrates, lipids, and nucleic acids; metabolism and the regulation of metabolic processes. For students in life sciences, dietetics, and medical technology. Three hours of lecture and one three-hour laboratory session weekly.

Prerequisite: CHEM 231 or its equivalent.
Not open to departmental majors in chemistry.
369 Professional Experience (1-3) 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.

375 Specialized Topics in Chemistry (1-4) 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.

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.
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.

410 Review of Chemistry Fundamentals (1) A senior course which reviews fundamental chemistry concepts in the areas of physical, organic, inorganic, analytical, and biochemistry, and develops critical thinking skills.

Prerequisite: CHEM 225, 344 or permission of the department chairperson.

Open only to chemistry majors or chemistry teaching majors.

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 235 or permission of the department chairperson.

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.

430 Organic Laboratory Techniques (2) Laboratory course that includes multistep syntheses of organic compounds, their isolation, purification, and characterization using modern spectroscopic and chromatographic techniques. Six hours of laboratory weekly.

Prerequisite: CHEM 232 or its equivalent.
450 Inorganic Chemistry (4) 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. Four hours of lecture weekly.

Prerequisite: CHEM 232 or 235 or 360; MATH 161 or 165.

454 Theory and Practice of Inorganic and Organometallic
Synthesis (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 450.
Prerequisite or parallel: CHEM 344.
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 235.

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.
465 Biochemistry Laboratory Techniques (1) Laboratory designed to introduce and emphasize important laboratory techniques in biochemistry. Includes enzyme kinetic analyses, electrophoresis, high performance liquid chromatography, and ultraviolet/visible spectral analysis. Three hours of laboratory weekly.

Prerequisite: CHEM 232 or 235.
Prerequisite or parallel: CHEM 463.
470 Independent Study and Research (1-3) 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.

## 475 Exploration of Selected Topics in Chemistry (1-4)

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.

## 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), 66-72 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| CS | 120 | Computer Science 1 | 4 |
|  | 121 | Computer Science 2 | 4 |
|  | 222 | Advanced Programming | 3 |
|  | 224 | Des and Analy of Algorithms | 3 |
| 230 | Computer Org and Arch | 3 |  |
| 239 | Social and Professional Issues | 1 |  |
| 327 | Dist Proc and Networks | 3 |  |
| 335 | Programming Languages | 3 |  |
|  | 346 | Database Design | 3 |
| 376 | Operating Systems | 3 |  |
|  | 380 | Theory of Computation 1 | 3 |
| 495 | Software Engineering 1 | 3 |  |
| 498 | Software Engineering 2 | 3 |  |


| 12-16 credits from |  |  |  |
| :--- | :--- | :--- | :---: |
| CS | 124 | Discrete Structures (3) |  |
|  | or | $3-4$ |  |
| MATH | 215 | Discrete Systems (4) |  |
| MATH | 161 | Applied Calculus 1 (3) |  |
|  | or <br> 165 | Calculus 1 (4) | $3-4$ |
| MATH | 162 | Applied Calculus 2 (3) |  |
|  | or <br> 166 | Calculus 2 (4) | $3-4$ |
| MATH | 221 | Probability and Statistics (3) |  |
|  | or <br> 321 <br> or | Mathematical Statistics (4) |  |
| ECON | 221 | Business Statistics (3) | $3-4$ |
|  |  |  | $12-16 \mathrm{crs}$ |

3-5 credits from
BIO $\quad 111 \quad$ Principles of Biology 1 (4)
CHEM 111 General Chemistry 1 (4) or
GEOL 201 Earth, Life, and Time (3)
or
PHYC 120 General Physics 1 (5)
3-5
Electives, 12 credits from
$\begin{array}{lll}\text { CS } & 310 & \text { Web Programming (3) } \\ & 315 & \text { Game Programming (3) } \\ & 320 & \text { Mobile Software Dev (3) }\end{array}$

|  | 321 |
| :--- | :--- |
| 339 | Data Analytics (3) |
| 345 | Humanced Topics Seminar (3-6) |
| 369 | Professional Experience 1 (1-3) |
| 397 | Multitier Web Architectures (3) |
| 430 | Systems Programming (3) |
| 438 | Computer Graphics (3) |
| 446 | System Administration (3) |
| 447 | Network Security (3) |
| 455 | Data Mining (3) |
| 456 | Image Processing (3) |
| 457 | Applied Cryptography (3) |
| MATH | 499 | Independent Study (1-6)

$66-72 \mathrm{crs}$

## MINOR IN COMPUTER SCIENCE, 17 credits

PREFIX NO SHORT TITLE
CREDITS
Complete at least 17 credits from the following
CS 120 Computer Science 1 (4)
121 Computer Science 2 (4)
124 Discrete Structures (3)
222 Advanced Programming (3)
224 Des and Analy of Algorithms (3)
230 Computer Org and Arch (3)
239 Social and Professional Issues (1)
310 Web Programming (3)
315 Game Programming (3)
320 Mobile Software Dev (3)
321 Data Analytics (3)
327 Dist Proc and Networks (3)
335 Programming Languages (3)
339 Advanced Topics Seminar (3)
345 Human-Computer Interaction (3)
346 Database Design (3)
369 Professional Experience 1 (1-3)
376 Operating Systems (3)
380 Theory of Computation 1 (3)
397 Multitier Web Architectures (3)
430 Systems Programming (3)
438 Computer Graphics (3)
446 System Administration (3)
447 Network Security (3)
17 crs
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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| CS | 110 | Intro Comp Sci and Web Prog (3) |  |
|  | or |  |  |
|  | 120 | Computer Science 1 (4) | $3-4$ |
| CS | 200 | Computers and Society | 3 |
|  | 203 | Intro to Computer Security | 3 |
|  | 249 | Forensics | 3 |
| CS | 300 | Local and Wide Area Networks (3) |  |
|  | or <br> 327 <br> or | Dist Proc and Networks (3) |  |
| TCMP | 210 | Fundamentals of Network Design (3) | 3 |
| CS | 446 | System Administration | 3 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

$18-19 \mathrm{crs}$
Minor in Computer Security is not open to students with a Major in Computer Science or a Minor in Digital Forensics.

CERTIFICATE IN DATA ANALYTICS, 32 credits (See Certificates on page 21.)

## CERTIFICATE IN TRANSITION TO GRADUATE STUDIES IN COMPUTER SCIENCE, 24-32 credits

 (See Certificates on page 21.)CERTIFICATE IN WEB SOFTWARE
DEVELOPMENT, 26 credits
(See Certificates on page 21.)

## 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.

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.

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.

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.

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.

## 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.120 Computer Science 1 (4) Introduction to programming using a high-level language and an established programming paradigm. Emphasis on developing problem-solving skills and programming techniques. Topics include control structures, built-in data structures, simple sorting and searching, procedural abstraction, and paradigm-specific concepts and constructs. Required open-lab and closed-lab assignments to bring theory to practice.

Prerequisite or parallel: MATH 111 or 112 or 132 or 136 or 161 or 165 or equivalent (e.g., high enough math placement or completion of high school trigonometry or precalculus.)

121 Computer Science 2 (4) Continuation of Computer Science 1. Strong emphasis on object-oriented paradigm and related problem-solving skills and programming techniques. Topics include recursion, dynamic data structures and related algorithms, sorting and searching, file processing, and using standard libraries in chosen object-oriented environment. Open-lab and closed-lab assignments are required.

Prerequisite: CS 120 with a $C$ - or better grade.
124 Discrete Structures (3) Introduction to topics in discrete structures for computer science majors. Topics include propositional and predicate logic, sets, induction, recursion, relations, functions, combinatorial enumeration, Boolean algebra, and finite state machines. Applications of these topics to computer science are discussed.

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.

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.
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 and ENG 103 or equivalent.

Prerequisite or parallel: ENG 104 or 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.

224 Design and Analysis of Algorithms (3) Topics include: analysis of algorithms; dynamic programming; probabilistic algorithms, examples of geometric, combinatorial, and graph algorithms, pattern matching; introduction to NPcompleteness.

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.

## 230 Computer Organization and Architecture (3)

 Performance measurement and benchmarking, assembly language, machine language, integer and floating-point arithmetic, processor architectures, register sets, and microprogramming.Prerequisite: CS 121 and either CS 124 or MATH 215, all with $C$ - or better grades.

239 Social and Professional Issues (1) Discussion of social and professional issues in computer science.

Prerequisite: CS 222 with a $C$ - or better grade.
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.
269 Service Learning (1-3) 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.
299 Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
300 Local and Wide Area Networks (3) An introductory networking course with hands-on labs. LAN usage: file servers, print servers, and database servers. LAN design: writing systems, protocols, interconnection devices, and operating systems. WAN usage: file transfer protocols and remote information systems. WAN design: leased phone lines, protocols, and routers.

Parallel: CS 120 or 203.
310 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.
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.
320 Mobile Software Development (3) Developing software for iOS and/or Android phones and/or tablets. Using programming languages for those platforms such as Objective- C, Swift, and/or Java. Includes introductions to programming graphical user interfaces and consuming web services.

Prerequisite: CS 121 with a $C$ - or better.
321 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.

327 Distributed Processing and Networks (3) The hardware and software of computer networks and distributed processing. Develops the important design parameters and a general design methodology.

Prerequisite: CS 224 with a $C$ - or better grade.
335 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 230, both with $C$ - or better grades.

339 Advanced Topics Seminar (3-6) 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 department chairperson.

A total of 6 credits may be earned.
Open only to juniors and seniors.
345 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.
346 Database Design (3) An introduction to database design, including physical representation, modeling, database systems, and implementation.

Prerequisite: CS 222 with a $C$ - or better grade.
369 Professional Experience 1 (1-3) 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.
370 Professional Experience 2 (1-6) 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: 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.

376 Operating Systems (3) Investigate the functions and structure of computer operating systems, processors, and memory. Topics include process control, concurrency, scheduling, security, and file systems. Introduces topics in systems programming, including I/O programming, signals, and IPC.

Prerequisite: CS 222 and 230, both with $C$ - or better grades.

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 Chomski Hierarchy.

Prerequisite: CS 224 with a $C$ - or better grade.
397 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 and 310, both with $C$ - or better grades.

430 Systems Programming (3) Considers the computer system from the points of view of its architecture, operating system, and applications. Topics include processor organization, peripheral devices, I/O programming, system programs, monitor services, file organization, and real-time applications.

Prerequisite: CS 376 with a $C$ - or better grade.
438 Computer Graphics (3) Methods of developing, modifying, and rendering graphics displays. Emphasizes the design and writing of graphics software for both two- and three-dimensional displays. Knowledge of a structured highlevel language is required.

Prerequisite: CS 222 with a $C$ - or better grade.
446 System Administration (3) Creating user accounts, local user authentication, network user authentication with encryption, filesystem and fileserver access control, configuration of Web servers, Web server authentication, and traffic encryption.

Prerequisite: CS 300 or 327 or TCMP 210 or CIS 317 with a $C$ - or better.

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 327 and 376, both with $C$ - or better grades.

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.
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.
457 Applied Cryptography (3) Introduction of basic principles and application of cryptography. Topics include encryption, decryption, private and public key systems, and their mathematical foundation: divisibility and Euclidean algorithm, arithmetic of congruences, and large prime
numbers. Projects are implementations of related algorithms. LISP and JAVA are recommended languages.

Prerequisite: CS 222 with a $C$ - or better grade.
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.

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.
499 Independent Study (1-6) Special advanced studies of computer science topics not taught in other courses.

A total of 6 credits may be earned.
Open only to juniors and seniors.

## 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| General | education, 36 credits |  |  |
| ENG | 103 | Rhetoric and Writing |  |
|  | 104 | Composing Research | 3 |
| MATH | 125 | Quantitative Reasoning | 3 |
| HIST | 150 | The West in the World | 3 |

Fine Arts elective
One course from:

| AHS | 100 | Introduction to Art (3) |
| :--- | :--- | :--- |
| MUHI | 100 | Music (3) |
| THEA | 100 | Intro to Theatre (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 Sky: Geographic View (3) |
| GEOL | 101 | Planet earth Geol Environment (3) |
| HSC | 160 | Fundamentals of Human Health (3) |
| NREM | 101 | Environment and Society (3) |
| PHYC | 100 | Conceptual Physics (3) |

Humanities elective


## BACCALAUREATE DEGREES

Students will be guided by the outline of baccalaureate degrees (p. 18), the University Core Curriculum (p. 25), and the concentration areas listed below.

MAJOR IN CRIMINAL JUSTICE AND CRIMINOLOGY (BA/BS), 48 credits

PREFIX NO SHORT TITLE CREDITS
CJC 101 Intro to Criminal Justice 3
102 Introduction to Criminology 3
211 Race, Gender, and Crime 3
220 Research Methods in CJC 3
229 Decision Making and Ethics 3
251 Criminal Law 3
301 Evaluation Research in CJC 3
495 Capstone in Criminal Justice 3
24 credits from electives in CJC 24

48 crs

## MINOR IN CRIMINAL JUSTICE AND CRIMINOLOGY, 21 credits

PREFIX NO SHORT TITLE CREDITS
CJC 101 Intro to Criminal Justice 3
102 Introduction to Criminology 3
15 credits of electives in CJC 15

21 crs
Not open to CJC majors.
MINOR IN DIGITAL FORENSICS, 24 credits
PREFIX NO SHORTTITLE CREDITS
CJC 102 Introduction to Criminology 3
230 Introduction to Policing 3
251 Criminal Law 3
350 Criminal Evidence Procedure 3
CS 110 Intro Comp Sci and Web Prog 3
203 Intro to Computer Security 3
249 Forensics 3
GEOG 265 Intro Geographic Info Systems 3

Not open to computer security minors.
CRIMINAL JUSTICE AND CRIMINOLOGY (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)
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.

211 Race, Gender, and Crime (3) The purpose of this course is to examine 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 102.
Open only to CJC majors.
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, 102; or permission of the department chairperson.

229 (329) Decision-Making and Ethics in Criminal Justice (3) This course provides an examination of 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 102.
Open only to CJC majors.
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, 102; or permission of the department chairperson.

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, 102; or permission of the department chairperson.

250 Introduction to Courts/Judiciary (3) Introduction to the American court and judicial systems emphasizing their structure, operation, and objectives.

Prerequisite: CJC 101, 102; or permission of the department chairperson.

251 (351) Criminal Law (3) This course provides an examination of the functions of substantive criminal law; its historical foundations and limits. Emphasis is placed on Indiana criminal law.

Prerequisite: CJC 101 and 201.

Open only to CJC majors.
301 (221) 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 102 and 220.
Open only to CJC majors.
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 102.
Open only to CJC majors and minors.
332 Victimology (3) The purpose of this course is to examine the correlation of 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 102.
Open only to CJC majors and minors.
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 102 and 230.
Open only to CJC majors and minors.
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 102 and 240.
Open only to CJC majors and minors.
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 102 and 240.
Open only to CJC majors and minors.

350 Criminal Evidence and Procedure (3) This course intends to enhance 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 102 and 250.
Open only to CJC majors and minors.
369 Paid Professional Experience in Criminal Justice and Criminology (6 or 12) 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.

## 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.

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.
397 Constitutional Issues in Criminal Justice (3) This class explores legal precedents in the criminal justice system.
Analyses of appellate court decision are limited to those that are related to the $1^{\text {st }}, 2^{\text {nd }}, 4^{\text {th }}, 5^{\text {th }}, 6^{\text {th }}, 8^{\text {th }}$, and $14^{\text {th }}$ amendments. Topics include criminal investigations, custody, interrogations, searches and seizures, trial components, and sentencing.

Prerequisite: CJC 101 and 102 and 250.
Open only to CJC majors and minors.
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 102.
Open only to CJC majors and minors.
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.
410 Current Topics in Criminal Justice and Criminology
(3) This course 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 102.
Open only to CJC majors and minors.
479 Professional Experience in Criminal Justice and Criminology ( 6 or 12) 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.
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.
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.

## ECONOMICS

See the Department of Economics in the Miller College of Business for the listing of the Major in Economics, business concentration, 69 credits; financial analyst concentration, 72 credits; liberal arts concentration, 33-40 credits (p. 89); see teacher education programs in Social Studies for the Teaching Major in Social Studies with a discipline area in economics (p. 90) and Interdepartmental Programs for the Major in Mathematical Economics (p. 54).

## ENGLISH

## C. Day, Acting Chairperson <br> 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 offers 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, 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 3.0.

For information about the related minors in European studies and women's and gender studies, see Interdepartmental Programs, p. 35 .

## 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

## 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| ENG | 210 | Intro to Rhet and Writing | 3 |
|  | 220 | Language and Society | 3 |
|  | 230 | Reading and Writing About Lit | 3 |
|  |  | Intro to Creative Writing | 3 |
|  | 444 | Senior Seminar | 3 |
| 3 credits from |  |  |  |
| Creative writing course |  |  | 3 |
| 3 credits from |  |  |  |
| Linguistics course |  |  | 3 |
| 3 credits from |  |  |  |
| Literature course |  |  | 3 |
| 3 credits from |  |  |  |
| Rhetoric/Writing course |  |  | 3 |
| 9 credits of English electives from courses numbered 300 or above |  |  | 9 |
|  |  |  | 36 crs |
| Electives may not include WPP 392, 393, or any course specially designed for teacher preparation: ENG 150, 350, 395. May include only 3 credits of ENG 369. |  |  |  |
| 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. |  |  |  |
| ENG | 230 | Reading and Writing About Lit | 3 |
|  |  | Intro to Creative Writing | 3 |
|  | 405 | Spec Topics Creative Writing | 3 |
|  | 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)
307 Fiction Writing (3)
308 Poetry Writing (3)

310 Screenwriting (3)
406 Adv CNf Writing (3)
407 Adv Fiction Writing (3)
408 Adv Poetry Writing (3)
409 CW in the Community (3)
410 Adv Screenwriting (3)
489 Prac in Lit Edit and Publish (3)
3 credits from literature courses numbered 300-399

3 credits from literature courses numbered 400-499
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, 350, 395.

3
36 crs

## 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.
ENG 230 Reading and Writing About Lit 3
444 Senior Seminar 3
Distribution requirements
3 courses from British literature (one pre-1800 required)
ENG 260 British Lit 1: Beg to 1780 (3)
280 British Lit 2: 1780 to Pres (3)
362 Medieval British Literature (3)
363 Ren and 17th Cen Brit Lit (3)
364 Rest and 18th Cen Brit Lit (3)
365 19th Cen Brit Lit (3)
366 Brit Lit 1890-1930 (3)
367 Contemporary Brit Lit (3)
or appropriate ENG 400-level offerings
3 courses from American literature (one pre-1900
required)
ENG 240 American Lit 1: Beg to 1860 (3)
250 American Lit 2: 1860 to Pres (3)
345 Early American Lit (3)
346 Studies 19th Cen Amer Lit (3)
347 20th Century Amer Lit (3)
351 Contemporary American (3)
or appropriate ENG 400-level offerings
1 course from diverse literature
ENG 490 Literature and Gender (3)
491 Lit of African American Trad (3)
492 Native American Literature (3)

493 American Ethnic Literature (3)
494 Queer Lit and Queer Theory (3)
498 Studies in Global Literature (3)
1 course at the ENG 400-level

| ENG | 400 | Special Topics in English (3) |
| :---: | :---: | :--- |
|  | 402 | Cultural Studies (3) |
| 421 | Studies in Literary History (3) |  |
| 422 | Studies: Authors (3) |  |
| 423 | Studies in Drama (3) |  |
| 424 | Genre Studies (3) |  |
| 425 | Film Studies (3) |  |
| 464 | Shakespeare (3) |  |
| 496 | Literary and Critical Theory (3) |  |
| 497 | Studies: Lit in Translation (3) |  |

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, 350, 395. May include 3 credits of ENG 369.

## 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.

| ENG | 210 | Intro to Rhet and Writing | 3 |
| :---: | :---: | :--- | :--- |
|  | 213 | Intro to Digital Literacies | 3 |
| 231 | Professional Writing | 3 |  |
|  | 303 | History of Rhetoric | 3 |
| 335 | Writ and Read Public Discourse | 3 |  |
| 435 | Issues in Rhet and Writing | 3 |  |
|  | 444 | Senior Seminar | 3 |

ENG 104 or 114 are prerequisites for ENG 210, 213, 231, 303,335 , and 435. Students must take ENG 210 prior to taking ENG 303.

9 directed elective credits from the following courses (no more than 3 credits from ENG 369):
COMM 310 Communication and Democracy (3)
320 Persuasion (3)
322 Comm and Popular Culture (3)
385 Rhet of Marginalized Voices (3)
412 Rhetorical Thry and Criticism (3)
ENG 306 Creative Nonfiction Writing (3)
329 Editing and Style (3)
369 Professional Experience (3)
389 Practicum Peer Tutoring (3)
430 Document Design (3)
431 Rhet Writ and Emerging Media (3) 9
Students must take COMM 210 prior to taking COMM 310 or COMM 320. Students must take COMM 320
prior to taking COMM 412.

## Electives

Two elective courses in English numbered 205 and above. May not include ENG 206, or any course specifically designed for teacher preparation: ENG 150,350 , and 395.

## 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.

PREFIX NO SHORT TITLE
CREDITS

ENG 206 Reading Literature 3
285 Intro to Creative Writing 3
12 credits of creative writing courses, including at least
3 credits from courses numbered 405 and above

18 crs

## MINOR IN FILM/SCREENWRITING, 18 credits

PREFIX NO SHORT TITLE CREDITS

| ENG | 285 | Intro to Creative Writing | 3 |
| :---: | :---: | :---: | :---: |
|  | 310 | Screenwriting | 3 |
| TCOM | 363 | Film Genres | 3 |
|  | 360 | World Film History 1 (3) |  |
|  | or |  |  |
|  | 361 | World Film History 2 (3) | 3 |
| 3 credits | from |  |  |
| ENG | 410 | Adv Screenwriting (3) |  |
|  | 425 | Film Studies (3) | 3 |
| 3 credits | from |  |  |
| TCOM | 365 | Documentary Film History (3) |  |
|  | 465 | Film Theory Seminar (3) |  |
|  | 360 | World Film History 1 (3) |  |
|  | or |  |  |
|  | 361 | World Film History 2 (3) | 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.

## MINOR IN LINGUISTICS, 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :--- | :---: |
|  |  |  |  |
| ENG | 220 | Language and Society | 3 |
|  | 320 | Intro to Linguistics Science | 3 |
|  | 321 | English Linguistics | 3 |

Directed electives, 6 credits from
CH 337 Chinese Linguistics (3)
ENG 322 Development of Eng Lang (3)
323 Discourse Struc and Strategies (3)
328 Language and Gender (3)
332 Phonetics and Phonology (3)
400 Special Topics in English (3)
FR 337 Phonetics (3)
GER 337 Phonetics (3)
JAPA 337 Japanese Linguistics (3)
SP 337 SP Phonetics and SLA (3)
340 Survey in Spanish Linguistics (3)
SPAA 260 Speech Acoustics (3)
270 Language Development (3)
15 crs
Four semesters or the equivalent in one or more modern or classical languages other than one's native language are recommended.

## 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.

## PREFIX NO SHORT TITLE

CREDITS

ENG 206 Reading Literature (3)
or
230 Reading and Writing About Lit (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. 12

15 crs

## 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :--- | :--- | :---: |
| ENG | 213 | Intro to Digital Literacies | 3 |
|  | 231 | Professional Writing | 3 |
|  | 329 | Editing and Style (3) |  |
|  | or |  |  |
|  | 489 | Prac in Lit Edit and Publish (3) | 3 |
|  | 335 | Writ and Read Public Discourse (3) |  |
|  | or |  | 3 |
| 4430 | Document Design (3) | 3 |  |
|  | 431 | Rhet Writ and Emerging Media | $\overline{15 \mathrm{crs}}$ |

ENG 306, 307, 308, or 310 should be taken to satisfy the prerequisite for ENG 489, if elected. ENG 104 or 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
| ENG | 320 | Intro to Linguistics Science | 3 |
|  | 436 | Theory and Research in TESOL | 3 |
|  | 437 | Methods and Materials in TESOL | 3 |
| Directed electives, 6 credits from |  |  |  |
| ENG | 220 | Language and Society (3) |  |
|  | 321 | English Linguistics (3) |  |
|  | 332 | Phonetics and Phonology (3) |  |
|  | 438 | TESOL Curric Dev and Assess (3) |  |
|  | 457 | Practicum in TESOL (3) | 6 |
|  |  | 15 crs |  |

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.

## 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 and Teachers College 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

## PREFIX NO SHORT TITLE

CREDITS
Core requirements, 36 credits

| ENG | 205 | World Literature |
| :---: | :---: | :---: |
|  | 213 | Intro to Digital Literacies |
|  | 220 | Language and Society |
|  | 230 | Reading and Writing About Lit |
|  | 260 | British Lit 1: Beg to 1780 (3) |
|  | or |  |
|  | 464 | Shakespeare (3) |
|  | 321 | English Linguistics |
|  | 412 | Read in Sec Eng Class |
|  | 414 | Young Adult Literature |
|  | 444 | Senior Seminar |
| One class in American Literature |  |  |
| Choose from: |  |  |
| Group A: Before 1900: ENG 240, 345, 346 or |  |  |
| Group B: 1900-present: ENG 250, 347, 351 |  |  |
| COMM | 220 | Argumentation and Debate |
|  | 240 | Introduction to Human Comm (3) |
|  | or |  |
|  | 290 | Intercultural Communication (3) |

Complete one of the following concentrations
English concentration, 12 credits
ENG 285 Intro to Creative Writing
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.

One class in British Literature
Choose from: ENG 280, 362, 363, 364, 365, 366, 367, 464

3 credits from

Diverse literature electives 400 and above
Choose from ENG 490, 491, 492, 493, 494, 498

Communication studies concentration, 12 credits COMM 240 Introduction to Human Comm (3) or 290 Intercultural Communication (3)
Choose COMM 240 if you took COMM 290 in the core or choose COMM 290 if you took COMM 240 in the core.

| COMM | 375 | Presentational Communication | 3 |
| :--- | :--- | :--- | :---: |
|  | 475 | Coaching Directing Forensics | 3 |
| 320 | Persuasion (3) |  |  |
|  | or |  |  |
| 330 | Small Group Decision Making (3) |  |  |
|  | or |  | 3 |
| 370 | Nonverbal Communication (3) |  |  |
|  |  |  | 48 crs |

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Professional education sequence, 39 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed |  |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 380 | Princ of Tchng in Sec School | 3 |
| ENG | 150 | Intro to Secondary Eng Ed | 3 |
|  | 350 | Teach Writing in Sec Schools | 3 |
|  | 395 | Teach Lit and Lang Sec Schools | 3 |
| Student teaching | 12 |  |  |
|  |  |  | 39 crs |
|  |  | 87 crs |  |

See Professional Education Assessment/Decision Points, p. 389, 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, 438, or 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 gradepoint average of 2.5 or better: ENG 436, 437, 438, and 457.
- The ENL license portfolio must include evidence of the following:
- artifacts with attached rubrics from ENG 436, 437, 438 , and 457
- All student work included in the portfolio must have a grade-point average of 2.5 or better.


## PREFIX NO SHORT TITLE <br> CREDITS

ENG 334 Eng Linguistics for Educators 3
436 Theory and Research in TESOL 3
437 Methods and Materials in TESOL 3
438 TESOL Curric Dev and Assess 3
457 Practicum in TESOL 3
15 crs

## ENGLISH (ENG)

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.

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.
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.

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 102.
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 multimodal presentations of new knowledge. Core Transfer Library: English/Literature (IEL 1241)

Prerequisite: ENG 101 and 102; or ENG 103; or appropriate placement.

114 Composing Research (Honors College) (3) Applies fundamentals of rhetoric to the research process: methods of research; the rhetorical nature of research; elements, strategies, and conventions of research writing, including multimodal presentations of new knowledge. Major research project; some literary analysis.

Prerequisite: ENG 101, 102; or ENG 103; or appropriate placement.

Not open to students who have credit in ENG 104.
Open only to Honors College students.
150 Introduction to Secondary English Education (3) An introduction to secondary English teaching. Content includes constructing an informed vision of English and English teaching, developing basic skills for teaching English, and beginning preparation for teacher licensure.

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 230 or 206, or permission of the department chairperson.

Not open to honors students who have completed or will complete HONR 201, 202, or 203.

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.

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 114.
213 Introduction to Digital Literacies (3) Teaches ways of reading, analyzing, researching, and composing in emerging media.

## Prerequisite: ENG 104 or 114.

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.

## 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.

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.

## 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.

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.

## 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.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 114.
Open only to English majors and minors except by permission of the department chairperson.

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 114.

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 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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)

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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 114.
306 Creative Nonfiction Writing (3) Intensive study of creative nonfiction, with practice in writing and critique. Prerequisite: ENG 285.

307 Fiction Writing (3) Intensive study of fiction, with practice in writing and critique.

Prerequisite: ENG 285.
308 Poetry Writing (3) Intensive study of poetry, with practice in writing and critique. Prerequisite: ENG 285.

310 Screenwriting (3) Introduction to screenwriting for television, film, or new media, with practice in writing and critique.

## Prerequisite: ENG 285.

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)

321 English Linguistics (3) Modern English grammar with special attention to phrase and sentence-level syntax.

## 322 The Development of the English Language (3)

 Introduction to the historical development of the English language with attention to changes in vocabulary, grammar, and sounds.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.
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.

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.

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.
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.

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 114.
345 Early American Literature (3) Special topics in a range of authors, genres, movements, and/or ideas in early American literature (pre-colonial through 1800).

Prerequisite: ENG 230 or 206 or permission of the department chairperson.

## 346 Studies in Nineteenth-Century American Literature

(3) Special topics in a selection of genres, authors, movements, and ideas from the nineteenth century.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

347 Twentieth-Century American Literature (3) An examination of work selected from twentieth-century American authors.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

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: must have completed decision point two or permission of the department chairperson.

351 Contemporary American (3) Examination of literary texts, themes, and techniques from 1945 to the present.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

## 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 230 or 206, or permission of the department chairperson.

## 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 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

366 British Literature 1890-1930 (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 230 or 206, or permission of the department chairperson.

367 Contemporary British Literature (3) Study of literary works and cultural elements of the period from 1930 to the present. Texts may span a variety of genres, including poetry, fiction, nonfiction prose, and drama.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

369 Professional Experience (1-12) Supervised work experience appropriate for English majors and minors, including writing and research. Assignments may be parttime 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.

388 English Studies Abroad (3-12) English Studies at approved study-abroad sites. Credit applied to department requirements as approved by the department chairperson.

Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned.
389 Practicum in Peer Tutoring in Writing (3) Theories and practice of teaching writing and multiliteracies in nonclassroom settings. Includes classroom discussion of writing theories and writing center pedagogies and field experience in writing center or similar setting.

Prerequisite: special permission only.
390 Honors Colloquium in English (1-4) 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.

## 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.

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.

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).

404 Independent Study in English (1-3) 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.
405 Special Topics in Creative Writing (3) Variable topics course in creative writing.

Prerequisite: ENG 306 or 307 or 308.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.

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.

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.

409 Creative Writing in the Community (3) Creative writing projects in the local community, including readings, performances, and workshops.

Prerequisite: ENG 306 or 307 or 308.
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.

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 230.
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 230 or 206 or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

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.

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 114.

## 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.
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 114.

## 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 334.
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 334.
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 334.
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.

## 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, 437.
464 Shakespeare (3) An introductory study of representative plays (comedies, histories, tragedies) and some selections from the sonnets by Shakespeare.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

## 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 307 or 308 or 310.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.

491 Literature of African-American Traditions (3) Survey of the African-American literary tradition in the United States.

492 Native American Literature (3) Study of materials from the oral and written literatures of Native Americans.

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.

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.

496 Literary and Critical Theory (3) Study of major theoretical schools, concepts, and vocabularies pertinent to the study of literature in the 21 st Century.

Prerequisite or parallel: ENG 230 or 206, or permission of the department chairperson.

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 230 or 206, or permission of the department chairperson.

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.

## 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 understanding in the twenty-first century, the Department of Geography offers four distinct concentrations within the major.

- 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 designed for students with strong interests in weather and climate. The approach is to employ the general principles of science in systematic investigations of earth-atmosphere system and subsystem dynamics and to train students in the use of technology (satellites, radar, automated weather observations, and numerical weather prediction) to analyze these systems on a number of spatial and temporal scales. Two tracks have been developed within Concentration 4 to address a variety of student career interests within the fields of meteorology and climatology. The general track is intended for students seeking positions in which knowledge of meteorology and climatology is somewhat peripheral in satisfying primary task objectives. Examples include emergency management, environmental analysis, and transportation planning. The professional track 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).
The department also offers minors in geography, GIScience, meteorology and climatology, and travel and tourism.


## MAJOR IN GEOGRAPHY (BA/BS), 51-57 credits

Recommended minors for all concentrations include anthropology, history, natural resources, and environmental management.

## PREFIX NO SHORT TITLE CREDITS

Core requirements, 15 credits

| GEOG | 101 | Earth Sea Sky: Geographic View | 3 |
| :---: | :---: | :--- | :--- |
|  | 150 | Global Geography | 3 |
| 240 | Map Reading and Graphics | 3 |  |
|  | 250 | Spatial Analytical Methods | 3 |
|  | 265 | Intro Geographic Info Systems | 3 |

Complete one concentration
Concentration 1: Human Geography, 36 credits
GEOG 120 Economic Geog of Globalization 3
121 Geog of Cultural Environment 3
270 Geog of International Conflict 3
320 Immig and Ethnic Geog of US 3
321 Urban Geography 3
340 Cartograp Visual Spatial Data 3
350 Geog United States and Canada 3
423 Population Geography 3

6 credits from
GEOG 323 Tourism and Geography of Food (3)
344 Adv Geog Info Systems Analysis (3)

NREM 309 Human Dimensions Global Change (3) 6

6 credits from
GEOG 351
354 Geography of Asia (3)
356 Geog Russia and Its Neighbors (3)
357
Geography of Europe (3)
6

Minors in related fields are recommended.
Concentration 2: Travel and tourism, 42 credits
GEOG 121 Geog of Cultural Environment 3
261 Tourism Systems 3
262 Tourism Regions 3
369 Professional Experience (3-6)
or
479 Practical Experience (3-6)
491 Tourism Development

12 credits from
FCFN 250 Lodging Management (3)
or
376 Intro Event Management (3)
or
NUTR 363 Admin of Food and Nutr Systems (3)
GEOG 360 Tours and Meetings Management (3)
460 Travel and Tourism Consulting (3)
MGT 300 Managing Behavior in Org (3)
MKG 300 Principles of Marketing (3)
NREM 371 Outdoor Recreation and Socy (3)

392 Environmental Interpretation (3)
6 credits from GEOG 350 351 353
354
356 Geog Russia and Its Neighbors (3)
357 Geography of Europe (3)
480 Distant Areas Field Studies (3)
9 credits from

| GEOG | 120 | Economic Geog of Globalization (3) |  |
| :--- | :--- | :--- | :--- |
|  | 270 | Geog of International Conflict (3) |  |
|  | 320 | Immig and Ethnic Geog of US (3) |  |
|  | 321 | Urban Geography (3) |  |
|  | 323 | Tourism and Geography of Food (3) |  |
|  | 340 | Cartograp Visual Spatial Data (3) |  |
|  | 423 | Population Geography (3) |  |
|  | 470 | Political Geography (3) |  |
|  | 480 | Distant Areas Field Studies (3) |  |
| METC | 230 | Elementary Meteorology (3) |  |
|  | 331 | Global Climatology (3) |  |
|  | 334 | Atmospheric Hazards (3) | $\overline{57 \mathrm{crs}}$ |

Recommended minors for concentration 2 include modern languages and classics, food management, hospitality management, natural resources, environmental management, and any business or area studies.

## Concentration 3: GIScience, 36-39 credits

GEOG 340 Cartograp Visual Spatial Data 3
341 Cartogra Visual Spatial Data 23
342 Introduction to Remote Sensing 3
343 Advanced Remote Sensing 3
344 Adv Geog Info Systems Analysis 3
369 Professional Experience (3-6)
or
479 Practical Experience (3-6) 3-6
6 credits from
GEOG 443 Sem Adv Techniq Remote Sensing (3)
444 Adv Cartog Visual Spatial Data (3)
445 GIS Apps Design and Develop (3)
448 Geog Information System Design (3) 6
6 credits from
GEOG 120 Economic Geog of Globalization (3)
121 Geog of Cultural Environment (3)
270 Geog of International Conflict (3)
320 Immig and Ethnic Geog of US (3)
321 Urban Geography (3)
423 Population Geography (3)
470 Political Geography (3)
METC 230 Elementary Meteorology (3)

330 Weather Analysis (3)
331 Global Climatology (3)

334 Atmospheric Hazards (3)
6
6 credits from

GEOG | 350 |
| ---: |
| 351 |
| 353 |
| 354 |
| 356 |
| 357 |

Geog United States and Canada (3)
Latin American and Caribbean (3)
Geography of Indiana (3)
Geography of Asia (3)
Geog Russia and Its Neighbors (3)
Geography of Europe (3) 6

51-54 crs
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 Adv Geog Info Systems Analysis 3
350 Geog United States and Canada 3
METC 230 Elementary Meteorology 3
330 Weather Analysis 3
331 Global Climatology 3
332 Climate Chng and Modification 3
334 Atmospheric Hazards 3
450 Mesoscale Meteorology 3
6-9 credits from
GEOG 351 Latin American and Caribbean (3)
354 Geography of Asia (3)
356 Geog Russia and Its Neighbors (3)
357 Geography of Europe (3)
METC 490 Field Obs Severe Local Storms (6) 6-9
6 credits from
GEOG 340 Cartograp Visual Spatial Data (3)
341 Cartogra Visual Spatial Data 2 (3)
342 Introduction to Remote Sensing (3)
343 Advanced Remote Sensing (3)
443 Sem Adv Techniq Remote Sensing (3)
445 GIS Apps Design and Develop (3)
448 Geog Information System Design (3)
METC 410 Broadcast Meteorology (3)
435 Satellite, Radar, \& Forecastng (3) 6

51-54 crs
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.

## MAJOR IN METEOROLOGY AND CLIMATOLOGY (BA/BS), 84-89 credits

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| GEOG | 101 | Earth Sea Sky: Geographic View | 3 |
|  | 150 | Global Geography | 3 |
|  | 240 | Map Reading and Graphics | 3 |
|  | 250 | Spatial Analytical Methods | 3 |
|  | 265 | Intro Geographic Info Systems | 3 |
|  | 344 | Adv Geog Info Systems Analysis | 3 |
|  | 350 | Geog United States and Canada (3) |  |
|  | or |  |  |
| METC | 490 | Field Obs Severe Local Storms (6) | 3 or 6 |
|  | 230 | Elementary Meteorology | 3 |
|  | 330 | Weather Analysis | 3 |
|  | 331 | Global Climatology | 3 |
|  | 332 | Climate Chng and Modification | 3 |
|  | 334 | Atmospheric Hazards | 3 |
|  | 425 | Physical Meteorology | 3 |
|  | 435 | Satellite, Radar, \& Forecastng | 3 |
|  | 447 | Thermodynamic Meteorology | 3 |
|  | 449 | Synoptic Meteorology | 3 |
|  | 450 | Mesoscale Meteorology | 3 |
|  | 451 | Dynamic Meteorology | 3 |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
|  | 374 | Differential Equations | 3 |
| PHYC | 120 | General Physics 1 | 5 |
|  | 122 | General Physics 2 | 5 |
| 6-7 credits from |  |  |  |
| GEOG | 340 | Cartograp Visual Spatial Data (3) |  |
|  | 341 | Cartogra Visual Spatial Data 2 (3) |  |
|  | 342 | Introduction to Remote Sensing (3) |  |
|  | 343 | Advanced Remote Sensing (3) |  |
|  | 443 | Sem Adv Techniq Remote Sensing ( |  |
|  | 445 | GIS Apps Design and Develop (3) |  |
|  | 448 | Geog Information System Design (3) |  |
| MATH | 267 | Calculus 3 (4) |  |
| METC | 410 | Broadcast Meteorology (3) | 6-7 |
| 3-4 credits from |  |  |  |
| CHEM | 111 | General Chemistry 1 (4) |  |
| CS | 120 | Computer Science 1 (4) |  |
| GEOL | 206 | Oceans and Nations (3) |  |
|  | 420 | Oceanography (3) |  |
| PHYC | 450 | Electricity and Magnetism 1 (3) | 3-4 |
|  |  |  | 84-89 crs |
| 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. |  |  |  |

## MINOR IN HUMAN GEOGRAPHY, 21 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :--- | :---: |
| GEOG | 120 | Economic Geog of Globalization | 3 |
|  | 121 | Geog of Cultural Environment | 3 |
|  | 150 | Global Geography | 3 |
|  | 240 | Map Reading and Graphics | 3 |
|  | 270 | Geog of International Conflict | 3 |
|  | 321 | Urban Geography | 3 |
|  | 423 | Population Geography | 3 |
|  |  | 21 crs |  |

Not open to geography majors.
MINOR IN GIScience, 21 credits
PREFIX NO SHORT TITLE CREDITS
Core requirements, 9 credits
GEOG 265 Intro Geographic Info Systems 3
340 Cartograp Visual Spatial Data 3
342 Introduction to Remote Sensing 3
9 crs
12 credits from
GEOG 341 Cartogra Visual Spatial Data 2 (3)
343 Advanced Remote Sensing (3)
344 Adv Geog Info Systems Analysis (3)
443 Sem Adv Techniq Remote Sensing (3)
444 Adv Cartog Visual Spatial Data (3)
445 GIS Apps Design and Develop (3)
448 Geog Information System Design (3) 12
21 crs
Not open to geography concentration 3 majors.

## MINOR IN METEOROLOGY AND CLIMATOLOGY, 15 credits

PREFIX NO SHORT TITLE CREDITS

GEOG 101 Earth Sea Sky: Geographic View 3
METC 230 Elementary Meteorology 3
330 Weather Analysis 3

3 credits from
METC 331
Global Climatology (3)
Climate Chng and Modification (3) 3
3 credits from
METC 410 Broadcast Meteorology (3)
435 Satellite, Radar, \& Forecastng (3)
449 Synoptic Meteorology (3)

Not open to geography concentration 4 majors.

## MINOR IN TRAVEL AND TOURISM, 21 credits

PREFIX NO SHORT TITLE CREDITS
GEOG 121 Geog of Cultural Environment ..... 3
261 Tourism Systems ..... 3
262 Tourism Regions ..... 3
360 Tours and Meetings Management ..... 3
460 Travel and Tourism Consulting ..... 3
491 Tourism Development3
3 credits from approved 200-level or above GEOG electives

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. 262, for total requirements for this area.)

## PREFIX NO SHORT TITLE

CREDITS

Geography concentration, 15 credits
Refer to the Department of Geography listings, p. 311, for descriptions of these courses.

| GEOG | 120 | Economic Geog of Globalization | 3 |
| :--- | ---: | :--- | :--- |
|  | 121 | Geog of Cultural Environment | 3 |
| 150 | Global Geography | 3 |  |
|  | 265 | Intro Geographic Info Systems | 3 |
|  |  |  |  |
| 3 credits from |  |  |  |
| GEOG | 321 | Urban Geography (3) |  |
| 340 | Cartograp Visual Spatial Data (3) |  |  |
| 342 | Introduction to Remote Sensing (3) |  |  |
| 344 | Adv Geog Info Systems Analysis (3) |  |  |
| 350 | Geog United States and Canada (3) |  |  |
| 351 | Latin American and Caribbean (3) |  |  |
| 353 | Geography of Indiana (3) |  |  |
| 354 | Geography of Asia (3) |  |  |
| 356 | Geog Russia and Its Neighbors (3) |  |  |
| 357 | Geography of Europe (3) |  |  |
| 423 | Population Geography (3) |  |  |
| 470 | Political Geography (3) | 3 |  |

its from
321
Data (3

344
350
351
353
354
356
357

470

SCIENCE TEACHING MAJORS
(See Science, College of Sciences and Humanities, p. 260, for the Teaching Major in Earth/Space Science.)

## CERTIFICATE IN GIScience, 21 credits (See Certificates on page 21.)

## 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.

120 Economic Geographies of Globalization (3) A systematic approach to economic issues emphasizing local, regional, national, and global economic developments in the geographic setting.

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.

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.

240 Map Reading and Graphics (3) A non-technical approach to the study and making of maps. Introduction to the fundamentals of map design and construction as well as techniques for map analysis. A commercial graphics software is used to create general purpose maps for the visualization and analysis of geospatial information.

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 111 or 112 or 125 or 132 or 161 or 162 or 165 or 166.

Open only to geography majors and minors.
261 Tourism Systems (3) Surveys the history, components, and spatial structure of travel and tourism as a socioeconomic phenomenon and as an industry. Also examines its institutional organization, the motivations and flows of travelers, and global and local interactions and implications.

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.

## 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.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.

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

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.

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.

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.

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, 340.
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.

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.
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, 265; or permission of the instructor.

## 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.

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.

353 Geography of Indiana (3) A geographic examination of the physical, cultural, and economic diversity of the state. Field experiences supplement classroom activities.

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.

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.

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.

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, 262.
Open only to geography concentration 2 majors and minors, or by permission of the instructor.

369 Professional Experience (3-6) 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.
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.

## 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, 343.
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.
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, 344, or permission of the instructor.

448 Geographic Information System Design (3) Principles of geographic information system (GIS) design. Implementation of GIS technology. Database and userinterface design. Practical experience applying advanced GIS tools to analyze spatial data. Workshop format requires student motivated projects.

Prerequisite: GEOG 344.
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, 262.
Open only to geography concentration 2 majors and minors, or by permission of the instructor.

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.

479 Practical Experience (3-6) 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.
480 Distant Areas Field Studies (1-6) 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.

491 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, 262; or permission of the instructor.

## 495 Readings and Special Studies in Geography and

 Earth Science (1-6) 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.
## METEOROLOGY AND CLIMATOLOGY (METC)

230 (GEOG 230) Elementary Meteorology (3) Introductory presentation of basic meteorological processes with a focuson applying theory to the analysis and forecasting of local weather conditions.

330 (GEOG 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.
331 (GEOG 331) Global Climatology (3) Introduction to 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.
332 (GEOG 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.

334 (GEOG 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.
410 (GEOG 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.
425 (GEOG 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.

435 (GEOG 435) Satellite, Radar, and Forecasting (3) Study of the tools used to remotely sense and analyze the atmosphere, including meteorological satellites, Doppler radar, and forecast 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.
447 (GEOG 447) Thermodynamic Meteorology (3)
Application of physical gas laws such as the equation of state and hydrostatic equation to investigate adiabatic processesand parcel theory as they relate to atmospheric instability and connective development.

Prerequisite: METC 330 and MATH 165 and 166 and PHYC 120 and 122.

449 (GEOG 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.

450 (GEOG 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.
451 (GEOG 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 166 and PHYC 120 and 122.

## 490 (GEOG 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 tornadoes. Trip is preceded by a series of lectures on storm behavior, extreme weather forecasting, and safe chasing techniques.

Prerequisite: permission of the instructor.

## GEOLOGICAL SCIENCES

## R. Fluegeman, Chairperson

## bsu.edu/geology

Geoscientists study the earth with primary attention to its history, materials, and structure, and to the active processes that continue to change the landscape. Geologists investigate environmental problems such as geologic hazards involving flooding, earthquakes, and volcanic eruptions, evaluate groundwater resources, discover new mineral and petroleum deposits, study geochemical cycles associated with climate, and study the moon and planets.

The department offers three majors: 1) major in geology, 2) major in earth science, and 3) teaching major in earth/space science education. The teaching major in earth/space science education prepares students for teaching at the middle and high school levels. 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 earth science 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.

## MAJOR IN EARTH SCIENCE (BA/BS), 64 credits

Students are expected to have completed mathematics through MATH 112 or their high school equivalent as approved by the primary departmental advisor.

PREFIX NO SHORT TITLE
CREDITS

| CHEM | 111 | General Chemistry 1 | 4 |
| :--- | :--- | :--- | :--- |
| GEOL | 101 | Planet Earth Geol Environment | 3 |
|  | 105 | Lab in Physical Geology | 1 |
|  | 201 | Earth, Life, and Time | 3 |
|  | 207 | Environ Geology Geochem Cycles | 3 |
|  | 220 | Earth Materials | 3 |
|  | 240 | Geomorphology | 3 |
|  | 290 | Computer Applic Geosciences | 1 |
|  | 308 | Sedimentary Geology | 3 |
|  | 310 | Igneous Metamorphic Petrology | 3 |
|  | 315 | Structural Geology Tectonics | 4 |
|  | 350 | Physical Hydrology | 3 |
|  | 383 | Field Geology | 6 |
|  | 420 | Oceanography | 3 |
| METC | 230 | Elementary Meteorology | 3 |
| NREM | 221 | Soil Resources | 3 |

9-12 credits from
GEOL 409 Micropaleontology (3)
411 Advanced Ign Met Petrology (3)
412 Sedimentary Petrology (3)
413 Experimental Petrology (3)
416 Geology Hazards Environment (3)
425 Geophysics (3)
434 Applied Biostratigraphy (3)
435 Sequence Stratigraphy (3)

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440 Karst and Carbonates (3)
461 Hydrogeology (3)
462 Env Geol in the Field and Lab (3)
470 Groundwater Geochemistry (3)
471 Volcanology and Volc Hazards (3)
475 Glacial Geology (3)
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3-6 credits from

| GEOG | 265 | Intro Geographic Info Systems (3) |
| :--- | :--- | :--- |
|  | 342 | Introduction to Remote Sensing (3) |
| METC | 331 | Global Climatology (3) |
| NREM | 324 | Soil Classification Interpret (3) |

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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| CHEM | 111 | General Chemistry 1 | 4 |
|  | 112 | General Chemistry 2 | 4 |
| GEOL | 101 | Planet Earth Geol Environment | 3 |
|  | 105 | Lab in Physical Geology | 1 |
|  | 201 | Earth, Life, and Time | 3 |
|  | 207 | Environ Geology Geochem Cycles | 3 |



| 3 credits from |  |  |
| :--- | ---: | :--- |
| EMHS | 350 |  |
| GEOG | 265 | Intro Geographic Info Systems (3) |
|  | 342 | Introduction to Remote Sensing (3) |
| METC | 331 | Global Climatology (3) |
| NREM | 221 | Soil Resources (3) |

## MINOR IN GEOLOGY, 18 credits

PREFIX NO SHORT TITLE

## CREDITS

GEOL 101 Planet Earth Geol Environment 3
201 Earth, Life, and Time 3
12 credits from elective sequence approved by a geology faculty advisor (GEOL 206 not included)

18 crs
Specific elective sequences are recommended for particular majors such as various business, environmental planning, and science disciplines.

## TEACHER EDUCATION

## SCIENCE TEACHING MAJORS

(See Science, College of Sciences and Humanities, p. 260, for the Teaching Major in Earth/Space Science.)

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).

## 105 Laboratory in Physical Geology (1)

Practical study of minerals, rock, planemetric 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.

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.

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.

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.

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.

## 207 Environmental Geology-Geological/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.

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.

Not open to students who have credit in GEOL 435.
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.

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.

## 299X Experimental/Developmental Topics (1-6)

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.

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.

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.

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.

## 315 Structural Geology, Tectonics and Basic Field

Methods (4) Designed to give middle- and upper-level students an introduction to rock-deformation theory, structural geology, 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, 220; MATH 112 or equivalent, or permission of the department chairperson.

330 Geological Field Tour (1-6) Rocks, structure, fossils, landforms, environmental geology, 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.

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.
369 Professional Experience (1-4) 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.
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, 220, 240, 290, 308; or permission of the department chairperson.

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.

## 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, 310 or permission of the department chairperson.

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 noncarbonate chemical rocks.

Prerequisite: GEOL 201, 220, 310 or permission of the department chairperson.

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.
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, 207, 240; NREM 211 or EMHS 352; MATH 108 or high school equivalent, or permission of the department chairperson.

420 Oceanography (3) Description of geological and physical characteristics of the oceans, marine processes, and related topics.

Prerequisite: CHEM 111; GEOL 201, 207; or permission of the department chairperson.

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 165, and PHYC 110, or permission of the department chairperson.

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.
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.

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, 240.
Not open to students who have credit in GEOL 540.
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 165, and PHYC 110, or permission of the department chairperson.

Not open to students who have credit in GEOL 560.

## 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, 461 or 560.
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, 112; GEOL 101; or permission of the department chairperson.

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.

475 Glacial Geology (3) 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 120; or permission of the instructor.

480 Special Studies and Field Problems (1-3) 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.

485 Group Field Research Experience (3-6) 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.

499X Experimental Elective Course (1-6) 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.

## HISTORY

## A. Alves, Chairperson <br> 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 more information about the teacher education programs in social studies.
See the Interdepartmental Programs listing for information about minors in ancient studies and Asian studies.

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## MAJOR IN HISTORY (BA/BS), 39-42 credits

## PREFIX NO SHORT TITLE

CREDITS
Complete one concentration
Concentration 1: Major, 39 credits
Core requirements, 18 credits
HIST 151 World Civilization 1
152 World Civilization 2
200 Intro History Methods
201 American History, 1492-1876
202 US History, 1877 to Present
470 Senior Seminar

21 additional credits in HIST other than HIST 150:
3 additional credits in World history outside Europe (Asia, Middle East, Africa, Latin America)

3 additional credits in European history 3

3 additional credits in United States history
3 credits from Topics courses
9 credits from electives in history
21 crs
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
Public history core requirements, 18 credits
$\begin{array}{llll}\text { HIST } & 151 & \text { World Civilization } 1 & 3\end{array}$
152 World Civilization 23
200 Intro History Methods 3
201 American History, 1492-1876 3
202 US History, 1877 to Present 3
240 Introduction to Public History 3
18 crs
21-24 additional credits in HIST other than HIST 150:
European or World History (Asia, Middle East, 3 Africa, Latin America)

United States History
6
History electives 3

Public History Internship (HIST 369)
$21-24 \mathrm{crs}$
At least 9 of these 12 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.

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.


## MINOR IN HISTORY, 18 credits

| 9 credits from World history (Europe, Asia, Middle |  |
| :--- | :---: |
| East, Africa, Latin America) | 9 |
| 9 credits from United States history | 9 |
|  | 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

## PREFIX NO SHORT TITLE

CREDITS
Historical perspectives, 30 credits
HIST 151 World Civilization 1
152 World Civilization 2
200 Intro History Methods 3
201 American History, 1492-1876 3
202 US History, 1877 to Present 3
Two HIST courses from category $1 \quad 6$
One HIST course from category 23
One HIST course from category 3
One HIST course from category 43
30 crs
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)
215 Women in American History (3)
318 History of the American West (3)
400 Colonial America 1492-1763 (3)
401 Revolutionary America to 1800 (3)
405 Pre-Civil War America, 1800-48 (3)
407 US Civil War and Reconstruct (3)
409 Age of Reform (3)
411 Prosperity, Depression, War (3)
413 Post-World War II America (3)
415 History of Indiana (3)
416 Pre-Civil War South, 1776-1861 (3)
417 History of the New South (3)
430 US Diplomatic History to 1914 (3)
432 US Diplomacy Since 1914 (3)
Category 2: European History
HIST 454 Era of World War I, 1870-1918 (3)
455 Era of World War II, 1918-1945 (3)
456 Europe Since 1945 (3)
461 Development Greek Civilization (3)
462 Development Roman Civilization (3)
463 Medieval Civilization (3)
464 Byzantine Civilization (3)
467 Renaissance and Reformation (3)
471 France Since 1789 (3)
475 Britain, 1485-1714 (3)
476 Britain, 1760 to the Present (3)
481 Modern Germany (3)
482 Celtic Peoples Cultural Hist (3)
483 Irish History (3)
486 Russian Civilization to 1917 (3)
487 Soviet and Post-Soviet History (3)
Category 3: World History
HIST 370 Foundations Asian Civilization (3)
371 Tradition and Chng Modern Asia (3)
372 Africa Since 1500 (3)
373 History of the Middle East (3)
441 Comparative Slavery (3)
484 Southern Africa (3)
493 History Pre-modern East Asia (3)
495 Modern China, 1600 to Present (3)
496 Modern Japan, 1600 to Present (3)
Category 4: Topics in History
HIST
235
235 Historical Topics in Fim (3)
301 The US and the Vietnam War (3)
303 Oral History Workshop (3)
310 Intro History of US Business (3)
324 Selected Topics Latin Am Hist (3)
338 United States Urban History (3)
360 Topics in Military History (3)
421 Am Indians in Colonial and US (3)
422 Topics History Popular Culture (3)
423 Topics in Religious History (3)

424 Topics Race, Ethnic, Immigrant (3)
425 Topics US Western History (3)
426 Topics in African History (3)
427 Topics in Asian History (3)
446 History in the Digital Age (3)
452 Women Modern European History (3)
491 Topics in Middle East History (3)
497 Selected Topics European Hist (3-6)
499 Selected Topics American Hist (3-6)
Please consult the department chairperson for more information.

Second (concentration) licensure area:
Add one course from each of the four remaining areas: Economics, geography, government/political science, psychology, or sociology.

## 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.
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.

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.

152 World Civilization 2 (3) A survey of the development of world civilization from the early modern world to the present.

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.

## 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.

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)

202 American 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)

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.
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 sportappreciation 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 PEP 205.
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.

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.

235 (435) 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.

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.
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.

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.

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.

## 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 21 st centuries.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.

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.

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.

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.

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.

369 Public History Internship (3-12) 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.
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.

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.

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.

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 statessince Muhammed. Stresses indigenous societies and how they have dealt with Islam, imperialism, nationalism, development, and wars.

390 Honors Colloquium in History (1-3) 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.
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.

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.

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.

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.

## 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.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.

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.

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.

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.

415 History of Indiana (3) Exploration, colonization, and development of the state from the earliest time to the present.

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.

417 History of the New South (3) Reconstruction, industrial and agricultural progress, social life, and the new leadership after 1865.

## 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.

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.

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.

## 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.

## 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.

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.

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.

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.

## 432 United States Diplomatic History Since 1914 (3)

 Survey of the foreign relations of the United States since the outbreak of World War I.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.
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.

445 History and Historians (3) Historiography: the major historians and the writing of history from Thucydides to the present.

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.

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.

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.

450 Reading and Special Study (1-3) 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.
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.

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.

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.

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.

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.

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.

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.

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.

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.

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.
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.
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.

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.

476 Britain, 1760 to the Present (3) Examines key social, cultural, economic, and political developments in British history from 1760 to the present.

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.

## 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.483 Irish History (3) Covers all of Irish history from preChristian 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.

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.

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.

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.

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.

493 History of Pre-modern East Asia (3) Examines premodern East Asian politics, cultures, and social issues from earliest times to approximately 1800 through inter-regional and comparative frameworks.

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.

496 Modern Japan, 1600 to the Present (3) Descriptive and analytical survey of political and economic developments, foreign policy, and social and cultural change in modern Japan with emphasis on conditions contributing to its rapid modernization, nationalist and expansionist movements, and dynamic postwar recovery.

497 Selected Topics in European History (3-6) 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.

499 Selected Topics in American History (3-6) 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.

## SOCIAL STUDIES (SS)

150 Introduction to Social Studies Education at the Secondary Level (3) Introduction to teaching careers in social studies at the secondary level. Professionalism, teaching philosophy, job requirements, employment opportunities, state and national standards, beginning preparation for teacher licensure including initial steps in digital portfolio preparation, secondary school curricula, and the role of secondary education in the educational process are discussed.

Not open to students who have credit in EDSE 150.
Open only to social studies teaching majors.

## 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 and completion of HIST 200 with a $C$ or better, admission to the teaching curriculum.

Open only to social studies teaching majors.
392 Teaching State/World Connections (3) Methods and materials for helping students acquire the knowledge, skills, and attitudes needed for teaching state/world connections. Uses content from the other courses in the concentration area.

Prerequisite: SS 397.

## 395 Teaching Social Studies in Secondary Schools (3)

 Theory and practice of teaching secondary school social studies. Emphasizes methodology, materials, and specific application in the secondary classroom. Includes introductoryinvolvement in the teaching of social studies with a focus on rationale, planning, teaching, and evaluation.

Prerequisite: SS 350; 18 credits in social science content courses; permission of the department chairperson.

Parallel: may be taken with or after (but not before)
EDJH 385; EDSE 380.
Open only to social studies teaching majors.

## 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.

## 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.

450 Independent Study (1-3) 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.
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.

## 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. 55. The department minor in mathematics is open only to nondepartmental 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 is 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 the concentration in mathematics), 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
|  | 215 | Discrete Systems | 4 |
|  | 217 | Linear Algebra | 4 |
|  | 251 | Intro to Mathematics of Financ | 2 |
|  | 259 | Intro to Mathematical Software | 3 |
|  | 267 | Calculus 3 | 4 |
|  | 320 | Probability | 4 |
|  | 321 | Mathematical Statistics | 4 |
|  | 351 | Mathematics of Finance | 4 |
|  | 452 | Life Contingencies 1 | 4 |
|  | 457 | Actuarial Models 1 | 4 |
|  | 458 | Actuarial Models 2 | 3 |
|  | 498 | Senior Seminar | 2 |
| RMI | 270 | Principles of Risk Mgt and Ins | 3 |

## 6-7 credits from

CS 120 Computer Science 1 (4)
MATH 355 Topics in Actuarial Science (1-6)
428 Regression Time Series Models (3)
453 Life Contingencies 2 (4)
454 Mathematics of Investments (3)
459 Models in Financial Economics (3)
RMI 330 Employee Benefits and Ret Plan (3) or as approved

6-7
$59-60 \mathrm{crs}$
Students may earn up to 6 credits for MATH 355, but only 4 credits will apply toward the actuarial science major. 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, MATH 428 or ECON 424, FIN 300 and one from MATH 454 or FIN 310. Students are encouraged to take CS 120 and PHYC 120. PHYC 120 satisfies the TIER 1 natural science requirement in the University Core Curriculum. 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.

## MAJOR IN MATHEMATICAL SCIENCES (BA/BS),

 54-58 credits| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
|  | 215 | Discrete Systems | 4 |
|  | 217 | Linear Algebra | 4 |
|  | 259 | Intro to Mathematical Software | 3 |
|  | 267 | Calculus 3 | 4 |
|  | 320 | Probability | 4 |
|  | 374 | Differential Equations | 3 |
|  | 411 | Abstract Algebra 1 | 3 |
|  | 471 | Real Analysis 1 | 4 |
|  | 498 | Senior Seminar | 2 |
|  |  |  |  |
| Complete one concentration |  |  |  |
| Concentration 1: Mathematics, 15 credits |  |  |  |
| MATH | 412 | Abstract Algebra 2 | 3 |
|  | 472 | Real Analysis 2 | 3 |
|  |  |  |  |
| 9 credits from |  |  |  |
| MATH | 377 | Complex Analysis (3) |  |
|  | 415 | Coding and Communication (3) |  |

166 Calculus $2 \quad 4$
215 Discrete Systems 4
Linear Algebra

267 Calculus 3
320 Probability 4
374 Differential Equations 3
411 Abstract Algebra $1 \quad 3$
471 Real Analysis 1

Complete one concentration
Concentration 1: Mathematics, 15 credits
MATH 412 Abstract Algebra 2
472 Real Analysis 2
9 credits from
MATH 377 Complex Analysis (3)
415 Coding and Communication (3)


| 473 | Boundary Value Problems (3) |
| :--- | :--- |
| 475 | Topics Partial Dif Equations (3) |
| 497 | Student Faculty Colloquium (1-6) |

or approved MATH courses
$23-25 \mathrm{crs}$

## 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 and Teachers College for the descriptions of these courses and other professional requirements of the teacher education program.

## TEACHING MAJOR IN MATHEMATICS (BA/BS), 92-93 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
|  | 215 | Discrete Systems | 4 |
|  | 217 | Linear Algebra | 4 |
|  | 221 | Probability and Statistics | 3 |
|  | 250 | Advanced Pre-College Math | 3 |
|  | 496 | Capstone Math Teaching | 3 |
| Complete one concentration |  |  |  |
| Concentration 1: Middle school, 22 credits |  |  |  |
| MATH | 201 | Num Opec Alg Reas Elem Teach | 4 |
|  | 202 | Data Geo Meas Elem Teach | 3 |
|  | 310 | Algebra Elem Mid Scl Teach | 3 |
|  | 316 | Num Thry Elem Mid Scl Teach | 3 |
|  | 360 | Geometry Elem Mid Scl Teach | 3 |
| At least 6 credits from (as approved by advisor) |  |  |  |
| MATH | 251 | Intro to Mathematics of Financ (2) |  |
|  | 267 | Calculus 3 (4) |  |
|  | 311 | Algebraic Structures (3) |  |
|  | 335 | Mathematical Models (3) |  |
|  | 345 | Survey of Geometries (4) |  |
|  | 416 | Theory of Numbers (3) |  |
|  | 460 | History of Mathematics (3) |  |
|  | 470 | Intermediate Analysis (3) | 6 |
|  |  |  | 47 crs |
| Concentration 2: Secondary school, 23 credits |  |  |  |
| MATH | 267 | Calculus 3 | 4 |
|  | 311 | Algebraic Structures | 3 |
|  | 335 | Mathematical Models | 3 |
|  | 345 | Survey of Geometries | 4 |
|  | 460 | History of Mathematics | 3 |
|  | 470 | Intermediate Analysis | 3 |

At least 3 credits from (as approved by advisor)

| MATH | 251 | Intro to Mathematics of Financ (2) |
| :--- | :--- | :--- |
|  | 320 | Probability (4) |
| 362 | Numerical Analysis 1 (3) |  |
| 374 | Differential Equations (3) |  |
| 377 | Complex Analysis (3) |  |
| 411 | Abstract Algebra 1 (3) |  |
| 415 | Coding and Communication (3) |  |
| 416 | Theory of Numbers (3) |  |
| 441 | Geometry and Topology (3) |  |
| 445 | Differential Geometry (3) |  |
| 456 | Intro Operations Research (3) |  |
| 471 | Real Analysis 1 (4) |  |
| 473 | Boundary Value Problems (3) |  |
| 475 | Topics Partial Dif Equations (3) |  |
| 497 | Student Faculty Colloquium (1-6) |  |

## 48 crs

Students are encouraged to take CS 120 and PHYC 120. PHYC 120 satisfies the TIER 1 natural science requirement in the University Core Curriculum. All students will be required to take a comprehensive exam designated by the department.

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| Professional education sequence, 45 credits <br> EDFO 420 |  |  |  |
| EDJH | 385 | Poc, Hist, Phil Found of Ed |  |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 320 | Read Div Sec Cont Class | 3 |
|  | 380 | Princ of Tchng in Sec School | 3 |
| MATH | 150 | Intro Secondary Math Education | 3 |
|  | 331 | Technology Teach Assess Math | 3 |
|  | 393 | Teach Mathematics Middle Schl | 3 |
|  | 395 | Teach Mathematics Secondary | 3 |
| Student teaching | 12 |  |  |
|  |  |  | 45 crs |
|  |  |  |  |
|  |  | $92-93 \mathrm{crs}$ |  |

See Professional Education Assessment/Decision Points, p. 389, 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.

Middle school/junior high licensure in mathematics will be granted when the following criteria are met:

- all requirements for the elementary intermediate license;
- completion of the following mathematics content courses with a $C$ - or better grade;
- completion of the following mathematics content courses with a 2.5 minimum grade-point average;
- completion of the professional education courses with a 2.5 minimum grade-point average;
- passing score on the exam for middle school mathematics.
Decision Point 2 - Students must complete the following
before registering for MATH 393:
- Meet with a MJH Mathematics advisor to declare interest in the program and to review progress.
- Complete all Decision Point 1 and 2 requirements for Elementary Education.
- Complete the following mathematics content courses with a grade of $C$ - or better and a grade-point average of 2.5 or better; MATH 161 or 165,181 , and 310 .
- A Calculus Presentation delivered to faculty members in the Department of Mathematical Sciences and receiving a score of "basic" or better.
- In the digital portfolio, include a reflective artifact addressing what was learned in the above courses and the need for acquiring knowledge beyond the level taught in the middle grades.
- In the digital portfolio, include a reflective artifact addressing what was learned about mathematics and teaching mathematics from the experience of preparing and delivering the Calculus Presentation.
Decision Point 4 -Students must complete the following to receive recommendation for licensure in middle school/junior high mathematics:
- Meet with a MJH Mathematics advisor to review progress.
- Complete all Decision Point 3 and 4 requirements for Elementary Education.
- Complete student teaching in a middle school/junior high mathematics classroom or in a grade 5 or 6 elementary school classroom.
- Complete 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 $165,181,310,316,331$, and 360.
- Complete 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.
- In the digital portfolio, include one new artifact for each of seven of the ten INTASC principles, each with an accompanying rationale clearly labeled "DP3," that addresses knowledge, performances, or dispositions related to teaching middle school mathematics.
- Earn a passing score on the exam for Middle School Mathematics.


## PREFIX NO SHORT TITLE

CREDITS
Middle school/junior high content area, mathematics, 24-31 credits
MATH 161 Applied Calculus 1 (3)
or
165 Calculus 1 (4) 3-4
181 Elementary Probability Stats
310 Algebra Elem Mid Scl Teach
316 Num Thry Elem Mid Scl Teach
331 Technology Teach Assess Math
360 Geometry Elem Mid Scl Teach
$18-19 \mathrm{crs}$
Professional education, 6-12 credits
EDJH 385 Prin of Tchng in Mid Schl 3
MATH 393 Teach Mathematics Middle Schl 3
Additional student teaching

Additional student teaching may be waived if elementary student teaching is in grade 5 or grade 6 .

## MATHEMATICAL SCIENCES (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. Offered credit/no credit only.

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.

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 161 or 165.

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 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.

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.

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.

## 150 Introduction to Secondary Mathematics Education

(3) An introduction to secondary mathematics teaching. Content includes constructing an informed vision of mathematics and mathematics teaching, developing basic skills for teaching mathematics, and beginning preparation for teacher licensure.

Prerequisite or parallel: MATH 165 or permission of the department chairperson.

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.
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.
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, 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.

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.

181 Elementary Probability and Statistics (3) Algebrabased 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.

## 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.

## 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.

## 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 202.

Open only to special education majors.
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 165, or permission of the department chairperson.

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 165, or permission of the department chairperson.

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 165, or permission of the department chairperson.

## 250 Pre-College Mathematics from an Advanced

Viewpoint (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, theory of equations, and measurement.

Prerequisite: C- or better in MATH 166 and 215; and a $C$ or better in MATH 150.

Open only to mathematics teaching majors.

## 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 112, or appropriate score on the SAT/ACT, or appropriate scores on the mathematics placement test, or permission of the department chairperson.

259 Introduction to Mathematical Software (3) Basic introduction to mathematical software currently used for solving math-related problems on computers. Includes a regularly scheduled computer laboratory.

Prerequisite: $C$ - or better in MATH 215 or permission of the department chairperson.

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.

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.
298 Undergraduate Colloquium (1) A series of brief introductions to the mathematical landscape including glimpses of mathematics in the workplace. Topics are drawn from all areas of the mathematical sciences.

A total of 3 credits may be earned, but no more than 1 in any one semester or term.

299X Experimental/Developmental Topics (1-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.

## 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.
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 217 or permission of the department chairperson.

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.

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.

Prerequisite or parallel: MATH 215.
321 Mathematical Statistics (4) Point and interval estimation, maximum likelihood, 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.

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.

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 217, or permission of the department chairperson.

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 215 and 217 or permission of the department chairperson.

351 Mathematics of Finance (4) Mathematical theory of compound interest, force of interest, annuities, equations of value, yield rates, amortization, sinking funds, bonds, market derivatives, depreciation, and current topics in finance.

Prerequisite: $C$ - or better in MATH 165 and 251 or permission of the department chairperson.

Prerequisite or parallel: MATH 166.

355 Topics in Actuarial Science (1-6) Selected topics in actuarial science with emphasis on individualized study for the actuarial exams given by the Society of Actuaries and the Casualty Actuarial Society.

Prerequisite: permission of the department chairperson.
A total of 4 credits may be counted as electives for the major in actuarial science.

A total of 6 credits may be earned.
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.
362 Numerical Analysis 1 (3) Topics include error analysis, locating roots of equations, interpolation, numerical differentiation and integration, spline functions, smoothing of data. Includes programming of numerical algorithms.

Prerequisite: $C$ - or better in MATH 162 or 166; and MATH 259 or CS 120; or permission of the department chairperson.

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 362 or permission of the department chairperson.

## 368 Unpaid Professional Experience in Mathematical

 Sciences (1-8) 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. Offered credit/no credit only.Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned in MATH 368 and 369 combined.

## 369 Paid Professional Experience in Mathematical

Sciences (1-8) 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. Offered credit/no credit only.

Prerequisite: permission of the department chairperson.
A total of 8 credits may be earned in MATH 368 and 369 combined.

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 166 or permission of the department chairperson.

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.

390 Honors Colloquium in Mathematics (1-6) Selected topics in mathematics with emphasis on individualized study.

A total of 6 credits may be earned.

## 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.

## 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-hour 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 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.

## 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.

## 395 Teaching and Learning Mathematics in the

 Secondary School (3) Examination of national and state mathematics standards, curricular materials, and methods forteaching 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 311 or 310 , and MATH 345 or 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: EDJH 385 and EDSE 380.
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 217; or permission of the department chairperson.

412 Abstract Algebra 2 (3) An introduction to the theory of rings, including integral domains, division rings, and fields. Quotient fields of integral domains. Homomorphisms, ideals, and quotient structures. Factorization in commutative rings. Polynomial rings and field extensions. Aspects of Galois theory.

Prerequisite: $C$ - or better in MATH 411; or permission of the department chairperson.

## 415 Mathematics of Coding and Communication (3)

 Exploration of applications of number theory, group theory, and linear algebra to areas such as cryptography and errorcorrecting 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.

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.

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.

## 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, auto-regressive, integrated, moving average (ARIMA) models, and forecasting.

Prerequisite: $C$ - or better in MATH 321 or its equivalent; or permission of the department chairperson.

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.

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 267; or permission of the department chairperson.

445 Differential Geometry (3) Fundamentals of differential geometry, as an extensive study of curves and surfaces in 3space. 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 267; or permission of the department chairperson.

452 Mathematics of Life Contingencies 1 (4) Survival distributions, life tables; the mathematics of life insurance, life annuities, net premiums, and net premium reserves.

Prerequisite: $C$ - or better in MATH 321 and 351 ; or permission of the department chairperson.

453 Mathematics of Life Contingencies 2 (4) Mathematics of multiple life functions, multiple decrement models, valuation theory for pension plans, insurance models including expenses, nonforfeiture benefits, and dividends.

Prerequisite: $C$ - or better in MATH 452; or permission of the department chairperson.

454 Mathematics of Investments (3) Mathematical analysis and actuarial principles of investments and asset management.

Prerequisite: $C$ - or better in MATH 320 and 351; or permission of the department chairperson.

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 166, and in 217; or permission of the department chairperson.

457 Actuarial Models 1 (4) Loss and frequency distributions, limited expected value, effects of inflation, parametric and non-parametric models, identification procedures for insurance company data, bootstrapping, Bayesian analysis, compound frequency, methods for censored and truncated data, classical and Bayesian credibility models, experience rating.

Prerequisite: $C$ - or better in MATH 321; or permission of the department chairperson.

458 Actuarial Models 2 (3) Basic functions related to actuarial models, common parametric models, maximum likelihood estimation for censored or truncated data, nonparametric estimation, hypothesis testing, models with covariables, simulation, and other topics as time permits.

Prerequisite: $C$ - or better in MATH 321; or permission of the department chairperson.

459 Models in Financial Economics (3) Mathematical and economic analysis of financial instruments and the management of financial and investment risk.

Prerequisite: $C$ - or better in MATH 320 and 351; or permission of the department chairperson.

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 165; or permission of the department chairperson.

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.

465 Topics in Computational Mathematics (1-6) 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.
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 215, or permission of the department chairperson.

471 Real Analysis 1 (4) Real and complex number systems: ordered sets, least upper bound property, fields, Archimedean
property; 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; Differentiation: derivative, Mean Value Theorem, l'Hospital's Rule, Taylor's Theorem.

Prerequisite: $C$ - or better in MATH 215 and 267; or permission of the department chairperson.

472 Real Analysis 2 (3) The Riemann-Stieltjes integral and Fundamental Theorem of Calculus. Sequences and series of functions. Differential calculus of functions of several variables. Inverse and implicit function theorems. Extremum problems. Lebesgue integration and comparison with the Riemann integral.

Prerequisite: $C$ - or better in MATH 471; or permission of the department chairperson.

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.

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 374; or permission of the department chairperson.

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, 465.
497 Student-Faculty Colloquium (1-6) 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.
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.
499 Reading and Honors (1-8) Juniors and seniors, with the approval of the mathematical sciences department, may enroll for special advanced work not offered in courses at the 300and 400- levels.

Prerequisite: approval of the department chairperson.
A total of 8 credits may be earned.
Open only to juniors and seniors.

## MODERN LANGUAGES AND CLASSICS

C. Luke, 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 (765-2851361). 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), 45 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| CH | 101 | Beginning Chinese 1 | 4 |
|  | 102 | Beginning Chinese 2 | 4 |
|  | 201 | Intermediate Chinese 1 | 4 |
|  | 202 | Intermediate Chinese 2 | 4 |
|  | 301 | Advanced Chinese 1 | 4 |
|  | 302 | Advanced Chinese 2 | 4 |
|  | 303 | Readings in Chinese | 3 |
|  | 304 | Composition | 3 |
|  | 334 | Chinese Culture and Civil (3) |  |
|  | or |  |  |
|  | 335 | Contemporary Chinese Culture (3) | 3 |
|  | 401 | Contemporary Masterpieces (3) |  |
|  | or |  |  |
|  | 402 | Classical Masterpieces (3) | 3 |
| 9 credits from 300- and 400-level CH courses |  |  | 9 |

## MAJOR IN CLASSICAL CULTURE (BA/BS), 33 credits

## PREFIX NO SHORT TITLE

CREDITS
6 credits from GRK or LAT at the college level 6
CC 201 Cultural Life Ancient Greece
202 Cultural Life Ancient Rome
3
301 Classical Lit in English Trans (3-6) 3
305 Classical Myth and Theory 3

15 credits from
CC, GRK, LAT or from courses on the cultures of the ancient Mediterranean in other disciplines

33 crs
It is strongly recommended that students take CC 105 before taking CC 201 or 202. CC 105 will count toward the 33 credits required for the major. Only 3 credits may be earned for the major from CC 101 or 102. Only 6 credits may be earned for the major from courses other than CC, GRK, LAT, or HIST. Course other than CC, GRK, LAT, or HIST must be pre-approved by the department chairperson.

## MAJOR IN CLASSICAL LANGUAGES (BA/BS), 33-39 credits

PREFIX NO SHORTTITLE CREDITS
Greek concentration:
GRK 101 Beginning Greek $1 \quad 3$
102 Beginning Greek 23
201 Intermediate Greek 1 3
202 Intermediate Greek 2 3
6 credits from 300-level GRK courses 6
15 credits from CC and/or LAT and GRK courses

Latin concentration:
LAT 101 Beginning Latin $1 \quad 3$
102 Beginning Latin 2 3
201 Intermediate Latin 13

202 Intermediate Latin 2 3

| 9 credits from 300- and 400-level LAT courses | 9 |
| :--- | :---: |
| 18 credits from CC and/or LAT and GRK courses | $\frac{18}{39 \mathrm{crs}}$ |

## MAJOR IN FRENCH (BA/BS), 41 credits

| PREFIX | NO | SHORT TITLE |
| :--- | :--- | :--- |
| FR |  |  |
|  | 101 | Beginning French 1 |
| 102 | Beginning French 2 |  |
| 201 | Intermediate French 1 |  |
| 202 | Intermediate French 2 |  |
| 301 | Conversation |  |
| 302 | Composition |  |
| 360 | Intro to French Lit Readings |  |
|  |  |  |
| 18 credits from 300- and 400-level FR courses |  |  |


| PREFIX | NO | SHORT TITLE |
| :--- | :--- | :--- |
|  |  |  |
| GER | 101 | Beginning German 1 |
|  | 102 | Beginning German 2 |
| 201 | Intermediate German 1 |  |
| 202 | Intermediate German 2 |  |
| 301 | Conversation |  |
|  | 302 | Composition |
|  | 21 credits from 300 - and 400-level GER courses |  |

## MAJOR IN JAPANESE (BA/BS), 45 credits

## PREFIX NO SHORT TITLE

JAPA 101 Beginning Japanese 1
102 Beginning Japanese 2
201 Intermediate Japanese 1
202 Intermediate Japanese 2
301 Advanced Japanese 1
302 Advanced Japanese 2
303 Readings in Japanese
304 Composition
334 Japanese Culture and Civ
401 Contemporary Masterpieces (3)
or
402 Classical Masterpieces (3)
9 credits from 300- and 400-level JAPA courses

CREDITS

CREDITS

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
PREFIX NO SHORT TITLE
CREDITS

Language, linguistics, and culture studies concentration
$\begin{array}{llll}\text { SP } & 101 & \text { Beginning Spanish } 1\end{array}$
102 Beginning Spanish 24
201 Intermediate Spanish 1 3
202 Intermediate Spanish 2 3
301 Conversation and Composition 3
302 Composition and Grammar 3
335 Topics in Hispanic Cultures (3-6) 3
337 SP Phonetics and SLA 3
340 Survey in Spanish Linguistics 3
404 Seminar in Lang and Ling (3-9) 3
12 credits from 300- and 400-level SP courses

44 crs
SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.

## Cultural and literary studies concentration

$\begin{array}{llll}\text { SP } & 101 & \text { Beginning Spanish } 1 & 4\end{array}$
102 Beginning Spanish 24
201 Intermediate Spanish 1 3
202 Intermediate Spanish 2 3
301 Conversation and Composition 3
302 Composition and Grammar 3
335 Topics in Hispanic Cultures (3-6) 3
361 Survey of Spanish Literature 3
362 Survey of Spanish-American Lit 3
403 Seminar in Culture Lit Studies (3-9) 3
12 credits from 300- and 400-level SP courses

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 major.

## MINOR IN CHINESE, 26-27 credits

PREFIX NO SHORT TITLE
CREDITS
CH 101 Beginning Chinese 1 4
102 Beginning Chinese $2 \quad 4$
201 Intermediate Chinese $1 \quad 4$

| 202 | Intermediate Chinese 2 | 4 |
| :--- | :--- | :--- |
| 301 | Advanced Chinese 1 | 4 |
| 334 | Chinese Culture and Civil | 3 |

334 Chinese Culture and Civil 3

Electives, 3-4 credits from

| CH | 302 | Advanced Chinese 2 (4) |
| :--- | :--- | :--- |
|  | 338 | Business Chinese (3) |
|  | 400 | Chinese Study Abroad (3-9) |
|  | 498 | Readings (1-9) |
| HIST | 495 | Modern China, 1600 to Present (3) |
|  |  |  |
| HIST 495 may substitute for CH 334 with permission of the |  |  |
| 26-27 crs |  |  |
| department chairperson. |  |  |

## MINOR IN CLASSICAL CULTURE, 15 credits

| PREFIX |  | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| CC | 301 | Classical Lit in English Trans (3-6) | 3 |
|  | 305 | Classical Myth and Theory | 3 |
| 9 credits from CC, GRK, and LAT courses |  |  | 9 |
|  |  |  | 15 crs |

## MINOR IN CLASSICAL LANGUAGES, 15-21 credits

| PREFIX NO | SHORT TITLE | CREDITS |
| :---: | :---: | :---: |
| Greek concentration: |  |  |
| GRK 101 | Beginning Greek 1 | 3 |
| 102 | Beginning Greek 2 | 3 |
| 201 | Intermediate Greek 1 | 3 |
| 202 | Intermediate Greek 2 | 3 |
| One 300-level GRK course |  | 3 |
|  |  | 15 crs |
| Latin concentration: |  |  |
| LAT 101 | Beginning Latin 1 | 3 |
| 102 | Beginning Latin 2 | 3 |
| 201 | Intermediate Latin 1 | 3 |
| 202 | Intermediate Latin 2 | 3 |
| One 300-level | AT course | 3 |
| 6 credits from | 00- or 400-level CC or | s 6 |

21 crs

## MINOR IN FRENCH, 23 credits

PREFIX NO SHORT TITLE
CREDITS

| FR | 101 | Beginning French 1 | 4 |
| :---: | :---: | :---: | :---: |
|  | 102 | Beginning French 2 | 4 |
|  | 201 | Intermediate French 1 | 3 |
|  | 202 | Intermediate French 2 | 3 |
|  | 301 | Conversation | 3 |
|  | 302 | Composition | 3 |
| 3 credits from 300- and 400-level FR courses |  |  | 3 |
|  |  |  | 23 crs |
| MINOR IN GERMAN, 23 credits |  |  |  |
| PREFIX |  | SHORT TITLE | CREDITS |
| GER | 101 | Beginning German 1 | 4 |
|  | 102 | Beginning German 2 | 4 |
|  | 201 | Intermediate German 1 | 3 |
|  | 202 | Intermediate German 2 | 3 |
|  | 301 | Conversation | 3 |
|  | 302 | Composition | 3 |
| 3 credits from 300- and 400-level GER courses |  |  | 3 |
|  |  |  | 23 crs |
| MINOR IN JAPANESE, 30 credits |  |  |  |
| PREFIX |  | SHORT TITLE | CREDITS |
| JAPA | 101 | Beginning Japanese 1 | 4 |
|  | 102 | Beginning Japanese 2 | 4 |
|  | 201 | Intermediate Japanese 1 | 4 |
|  | 202 | Intermediate Japanese 2 | 4 |
|  | 301 | Advanced Japanese 1 | 4 |
|  | 302 | Advanced Japanese 2 | 4 |
|  | 334 | Japanese Culture and Civ | 3 |
| 3 credits from |  |  |  |
| JAPA | 303 | Readings in Japanese (3) |  |
|  | 304 | Composition (3) |  |
|  | 338 | Business Japanese (3) | 3 |
| HIST 496 (Modern Japan, 1600 to Present) may substitute for JAPA 334 with permission of the department chairperson. |  |  |  |
|  |  |  |  |
| MINOR IN SPANISH, 23 credits |  |  |  |
| PREFIX | NO | SHORT TITLE | CREDITS |
| SP | 101 | Beginning Spanish 1 | 4 |
|  | 102 | Beginning Spanish 2 | 4 |
|  | 201 | Intermediate Spanish 1 | 3 |
|  | 202 | Intermediate Spanish 2 | 3 |
|  | 301 | Conversation and Composition | 3 |

201 Intermediate French $1 \quad 3$
202 Intermediate French 2 3
301 Conversation 3
302 Composition 3
3 credits from 300- and 400-level FR courses 3

## MINOR IN GERMAN, 23 credits

PREFIX NO SHORT TITLE
CREDITS

4
102 Beginning German $2 \quad 4$
201 Intermediate German 1 3
202 Intermediate German 2 3
Conversation
302 Composition 3
3 credits from 300- and 400-level GER courses 3
23 crs

## MINOR IN JAPANESE, 30 credits

PREFIX NO SHORT TITLE
CREDITS
4
102 Beginning Japanese $2 \quad 4$
Intermediate Japanese 1 4
301 Advanced Japanese $1 \quad 4$
302 Advanced Japanese $2 \quad 4$
334 Japanese Culture and Civ 3
3 credits from
JAPA 303 Readings in Japanese (3)
304 Composition (3)
338 Business Japanese (3)

HIST 496 (Modern Japan, 1600 to Present) may substitute for JAPA 334 with permission of the department chairperson.

## MINOR IN SPANISH, 23 credits

PREFIX NO SHORT TITLE

102 Beginning Spanish $2 \quad 4$
201 Intermediate Spanish 1 3
202 Intermediate Spanish 2 3
301 Conversation and Composition 3

302 Composition and Grammar
3 credits from 300- and 400-level SP courses
23 crs
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 and Teachers College 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| Professional education sequence, 40 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed |  |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 380 | Princ of Tchng in Sec School | 3 |
| FL | 150 | Intro to FL Education | 3 |
|  | 295 | FL Field Experience | 1 |
|  | 395 | WL Methods, Reading, Materials | 3 |
|  | 396 | Tech and Assessment in FLE | 3 |
| Student teaching | 12 |  |  |
|  |  | 40 crs |  |

See Professional Education Assessment/Decision Points, p. 389 , for additional information.

## TEACHING MAJOR IN FOREIGN LANGUAGE: CHINESE (BA/BS), 85 credits

| PREFIX |  | SHORT TITLE | CREDITS |
| :---: | :---: | :---: | :---: |
| CH | 101 | Beginning Chinese 1 | 4 |
|  | 102 | Beginning Chinese 2 | 4 |
|  | 201 | Intermediate Chinese 1 | 4 |
|  | 202 | Intermediate Chinese 2 | 4 |
|  | 301 | Advanced Chinese 1 | 4 |
|  | 302 | Advanced Chinese 2 | 4 |
|  | 303 | Readings in Chinese | 3 |
|  | 304 | Composition | 3 |
|  | $\begin{aligned} & 334 \\ & \text { or } \end{aligned}$ | Chinese Culture and Civil (3) |  |
|  | 335 | Contemporary Chinese Culture (3) | 3 |
|  | 337 | Chinese Linguistics | 3 |
|  | 401 | Contemporary Masterpieces (3) |  |
|  | or |  |  |
|  | 402 | Classical Masterpieces (3) | 3 |
| 6 credits from 300- and 400-level CH courses |  |  | 6 |
|  |  |  | 45 crs |

## TEACHING MAJOR IN FOREIGN LANGUAGE: FRENCH (BA/BS), 84 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :--- | :---: |
|  |  |  |  |
| FR | 101 | Beginning French 1 | 4 |
|  | 102 | Beginning French 2 | 4 |
|  | 201 | Intermediate French 1 | 3 |
| 202 | Intermediate French 2 | 3 |  |
| 301 | Conversation | 3 |  |
| 302 | Composition |  |  |
| 334 | Civ and Culture: Old Regime (3) |  |  |
|  | or |  | 3 |
| 335 | Civ and Culture: Modern France (3) | 3 |  |
| 360 | Intro to French Lit Readings | 3 |  |
| 401 | History of French Literature 1 | 3 |  |
| 402 | History of French Literature 2 |  |  |
|  |  | 12 |  |
| 12 credits from | 300- and 400-level FR courses | 44 crs |  |

## TEACHING MAJOR IN FOREIGN LANGUAGE: GERMAN (BA/BS), 84 credits

PREFIX NO SHORT TITLE CREDITS
GER 101 Beginning German $1 \quad 4$
102 Beginning German 2 4
201 Intermediate German 1 3
202 Intermediate German 23

|  | 301 | Conversation | 3 |
| :---: | :---: | :---: | :---: |
|  | 302 | Composition | 3 |
|  | 335 | Civilization and Culture | 3 |
| 6 credits from |  |  |  |
| GER | 361 | Survey of German Prose (3) |  |
|  | 362 | Survey of German Drama (3) |  |
|  | 363 | Survey of German Lyric (3) |  |
|  | 401 | History of German Literature (3) | 6 |
| 15 credits from |  | 300- and 400-level GER courses | 15 |
|  |  |  | 44 crs |
| TEACHING MAJOR IN FOREIGN LANGUAGE: JAPANESE (BA/BS), 85 credits |  |  |  |
| PREFIX NO |  | SHORT TITLE | CREDITS |
| HIST | 496 | Modern Japan, 1600 to Present | 3 |
| JAPA | 101 | Beginning Japanese 1 | 4 |
|  | 102 | Beginning Japanese 2 | 4 |
|  | 201 | Intermediate Japanese 1 | 4 |
|  | 202 | Intermediate Japanese 2 | 4 |
|  | 301 | Advanced Japanese 1 | 4 |
|  | 302 | Advanced Japanese 2 | 4 |
|  | 334 | Japanese Culture and Civ | 3 |
|  | 337 | Japanese Linguistics | 3 |
|  | 401 | Contemporary Masterpieces | 3 |
| 9 credits from 300- and 400-level JAPA courses |  |  | 9 |
|  |  |  | 45 crs |
| TEACHING MAJOR IN FOREIGN LANGUAGE: LATIN (BA/BS), 82 credits |  |  |  |
| PREFIX NO |  | SHORT TITLE | CREDITS |
| CC | 105 | Intro to the Classical World | 3 |
|  | 301 | Classical Lit in English Trans (3-6) | ) 3 |
| LAT | 101 | Beginning Latin 1 | 3 |
|  | 102 | Beginning Latin 2 | 3 |
|  | 201 | Intermediate Latin 1 | 3 |
|  | 202 | Intermediate Latin 2 | 3 |
|  | 305 | Prose Composition (3-6) | 3 |
| 9-12 credits from 300- and 400-level LAT courses |  |  | 9-12 |
| 9-12 credits from CC, GRK, and LAT courses |  |  | 9-12 |

## TEACHING MAJOR IN FOREIGN LANGUAGE: SPANISH (BA/BS), 84 credits

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| SP | 101 | Beginning Spanish 1 | 4 |
|  | 102 | Beginning Spanish 2 | 4 |
|  | 201 | Intermediate Spanish 1 | 3 |
|  | 202 | Intermediate Spanish 2 | 3 |
|  | 301 | Conversation and Composition | 3 |
|  | 302 | Composition and Grammar | 3 |
|  | 335 | Topics in Hispanic Cultures (3-6) | 3 |
|  | 337 | SP Phonetics and SLA | 3 |
|  | 340 | Survey in Spanish Linguistics | 3 |
|  | 361 | Survey of Spanish Literature | 3 |
|  | 362 | Survey of Spanish-American Lit | 3 |
|  | 403 | Seminar in Culture Lit Studies (3-9) |  |
|  | or |  |  |
|  | 404 | Seminar in Lang and Ling (3-9) | 3 |
| 6 credits from 300- and 400-level SP courses |  |  | 6 |

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.

## ARABIC (AR) <br> 101 Beginning Arabic 1 (5) The first course in beginning Arabic language. <br> 102 Beginning Arabic 2 (5) The second course in beginning Arabic language. <br> Prerequisite: AR 101.

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.
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.

## 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.

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.

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.

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.

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.

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.

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.

## 301 Classical Literature in English Translation (3-6)

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.
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.

303 Greek and Roman Cults (3) Introduces the religions of the ancient Greeks and Romans and examines the nature of their cult activities and theological speculations. Topics include prayer, sacrifice, feasting, ritual, scripture, myth, clergy, etc.

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.

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.
401 Ancient Epic (3) Greek and Roman epics studied as genres, as predecessors of Western epics, and as reflections of their cultures; selections will vary.

Prerequisite: CC 105, 301 or permission of the instructor.

402 Ancient Drama (3) Greek and Roman tragedy and comedy studied as genres, as predecessors of Western drama, and as reflections of their cultures; selections will vary.

Prerequisite: CC 105, 301 or permission of the instructor.

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.

404 Special Topics in Antiquity (3) Special research topics in classical culture, including period, author and genre topics, and methods.

Prerequisite: either CC 401, 402, 403 or permission of the instructor.

498 Readings (1-9) 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.

## CHINESE (CH)

101 Beginning Chinese 1 (4) The first course in the Chinese language.

102 Beginning Chinese 2 (4) The second course in the Chinese language.

Prerequisite: CH 101.
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.
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.
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).

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.
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.

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.

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.

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.

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.

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).

400 Chinese Study Abroad (3-9) 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.
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.
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.
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.
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 communication strategies in various contexts.

Prerequisite: CH 302 and 303 and 304.

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.

498 Readings (1-9) 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.

## FOREIGN LANGUAGES (FL)

150 Introduction to Foreign Language Education at the Secondary Level (3) An introduction to foreign language teaching at the secondary level. Emphasis on establishing an informed teaching philosophy, fostering basic skills for teaching foreign language, and beginning preparation for teacher licensure. Discussion of state and national standards for foreign language teaching and initial development of the digital portfolio.

Not open to students who have credit in EDSE 150.
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 sociopolitical and literary works.

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.
299X Experimental/Developmental Topics (3-12) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 12 credits may be earned.
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.

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.

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.

308 European Culture through Films (3) Study of the cultures of European countries through the medium of films. Topics and films may vary. May not be applied to foreign language majors or minors.

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 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.
369 Professional Experience (3-12) 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.

## 390 Honors Colloquium in Foreign Literature (3-6)

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.
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, technologyenhanced language learning, standards-based planning and assessment, diverse learners, and materials development. Review of current professional literature, trends, and licensing requirements.

Prerequisite: FL 295 or the equivalent in a modern or classical language; identification to pursue a teaching curriculum.

Parallel: EDSE 380; EDJH 385 recommended.
396 Technology and Assessment in Foreign Language (3) Current theory and practice of technology and assessment in the foreign language classroom. Evaluation of resources, preparation of instructional materials and instruments, articulation and integration of technology and assessment into curricula and lesson plans. Audio, video, and computer-based technologies. Assessment of oral, aural, writing, reading, and culture.

Prerequisite recommended: FL 395.
Open only to education majors or minors.
470 Immersive Study Abroad (1-3) 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.
479 Practical Experience (3-12) 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.
490 Independent Study (1-9) Topics to be chosen and investigated in consultation with the individual instructor.

A total of 9 credits may be earned.

## FRENCH (FR)

101 Beginning French 1 (4) The first course in the French language. Core Transfer Library: World Languages (IWL 1901)

102 Beginning French 2 (4) Core Transfer Library: World Languages (IWL 1902)

Prerequisite: FR 101.
201 Intermediate French 1 (3) Core Transfer Library: World Languages (IWL 1903)

Prerequisite: FR 102.
202 Intermediate French 2 (3) Core Transfer Library:
World Languages (IWL 1904)
Prerequisite: FR 201.
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.

302 Composition (3) Practice in written French with review of grammatical structures.

Prerequisite: FR 202 or the equivalent.
303 Grammar (3) An advanced study of French grammar, stressing creative expression in the language.

Prerequisite: FR 302 or its equivalent.
334 Civilization and Culture: The Old Regime (3)
Contributions made by France from the beginnings to the French Revolution. Origins of historical and cultural traditions. Supplemental literary selections.

Prerequisite: FR 202 or the equivalent, or permission of the department chairperson.

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.

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.

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.

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.

400 French Study Abroad (3-9) 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.
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.
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.
403 Seminar in French Literature (3-9) Seminar studies by author, genre, period, or theme. Topic to be announced.

Prerequisite: FR 301, 302; or the equivalent, or permission of the department chairperson.

A total of 9 credits may be earned.

## 404 Seminar in French Language or Civilization (3-9)

Seminar studies in grammar, style, conversation, or civilization. Topic to be announced.

Prerequisite: FR 301, 302; or the equivalent, or permission of the department chairperson.

A total of 9 credits may be earned.
470 French Immersive Study Abroad (1-3) 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.
498 Readings (1-9) Individualized reading or research to allow students to explore special topics with an individual instructor.

Prerequisite: FR 301, 302; or the equivalent.
A total of 9 credits may be earned.

## 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)

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.
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.
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.
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.

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.

303 Grammar (3) Advanced, in-depth study of German grammar and stylistic expression.

Prerequisite: GER 302 or permission of the department chairperson.

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.

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.

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.

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.

361 Survey of German Prose (3) Selections from Germanlanguage prose, short stories, and novellas designed to develop an appreciation of the literary heritage of Germanspeaking countries.

Prerequisite or parallel: GER 301.
362 Survey of German Drama (3) Selections from Germanlanguage dramatic texts designed to develop an appreciation of the literary heritage of German-speaking countries.

Prerequisite or parallel: GER 301.

363 Survey of German Lyric (3) Selections from Germanlanguage poetry, folksongs, and ballads designed to develop an appreciation of the literary heritage of German speaking countries.

Prerequisite or parallel: GER 301.
400 German Study Abroad (3-9) 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.
401 History of German Literature (3) This 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 302.
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 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.

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 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.

470 German Immersive Study Abroad (1-3) 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.
498 Readings (1-9) 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.

## GREEK (GRK)

101 Beginning Greek 1 (3) Introduction to ancient Greek. Emphasizes the alphabet, pronunciation, elementary grammar, and preparation of students for readings in classical and New Testament Greek.

## 102 Beginning Greek 2 (3)

Prerequisite: GRK 101 or its equivalent.
201 Intermediate Greek 1 (3) Intensive grammar review and readings from classical and New Testament sources.

Prerequisite: GRK 102 or the equivalent.

## 202 Intermediate Greek 2 (3)

Prerequisite: GRK 201 or the equivalent.

## 301 Advanced Greek 1 (3)

Prerequisite: GRK 201 or the equivalent, or permission of the department chairperson.

## 302 Advanced Greek 2 (3)

Prerequisite: GRK 201 or the equivalent, or permission of the department chairperson.

305 Homer (3) Selected readings from the Iliad and/or the Odyssey. Studies the topics of epic composition, dialect, Bronze and Archaic Age archaeology and social organization, and Homeric scholarship.

Prerequisite: GRK 202.
498 Readings (1-9) Individualized readings or research to explore special topics with an individual instructor.

Prerequisite: 15 credits of college Greek.
A total of 9 credits may be earned.

## ITALIAN (ITAL)

101 Beginning Italian 1 (4) The first course in the Italian language.

## 102 Beginning Italian 2 (4)

Prerequisite: ITAL 101 or its equivalent.

## JAPANESE (JAPA)

101 Beginning Japanese 1 (4) The first course in beginning Japanese language.

102 Beginning Japanese 2 (4) The second course in beginning Japanese language.

Prerequisite: JAPA 101.
201 Intermediate Japanese 1 (4) Designed for students with credit in JAPA 101 and 102. Further develops skills in
listening, speaking, reading, and writing Japanese, and increases knowledge of Japanese culture.

Prerequisite: JAPA 102 or its equivalent.
202 Intermediate Japanese 2 (4) Designed for students with credit in JAPA 201. Further enhances skills in listening, speaking, reading, and writing Japanese, and increases understanding of Japanese culture.

Prerequisite: JAPA 201 or its equivalent.
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.

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.
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.
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.

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.

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.

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.
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.

400 Japanese Study Abroad (3-9) 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.

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.

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.

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, 304; permission of the department chairperson.

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.

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.
470 Japanese Immersive Study Abroad (1-3) 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.
498 Readings (1-9) 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.

## LATIN (LAT)

101 Beginning Latin 1 (3) Introduction to Latin. Emphasizes pronunciation, elementary grammar, composition, and translation of simple Latin passages.

## 102 Beginning Latin 2 (3)

Prerequisite: LAT 101 or its equivalent.
201 Intermediate Latin 1 (3) Intensive grammar review and readings from Latin prose and poetry.

Prerequisite: LAT 102 or its equivalent.

## 202 Intermediate Latin 2 (3)

Prerequisite: LAT 201 or its equivalent.
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.

302 Introduction to Poetry 1 (3) Selections from Ovid, Vergil, and others.

Prerequisite: LAT 201 or the equivalent, or permission of the department chairperson.

303 Introduction to Prose 2 (3-6) 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.
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.

305 Prose Composition (3-6) 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.
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.

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.

403 Seminar in Latin Prose (3-6) Cicero.
Prerequisite: three years of college Latin or the equivalent, or permission of the department chairperson.

A total of 6 credits may be earned.
404 Seminar in Latin Poetry (3-6) 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.
498 Readings (1-9) 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.

## SPANISH (SP)

101 Beginning Spanish 1 (4) The first course in the Spanish language. Core Transfer Library: World Languages (IWL 1910)

102 Beginning Spanish 2 (4) Core Transfer Library: World Languages (IWL 1911)

Prerequisite: SP 101.
201 Intermediate Spanish 1 (3) Core Transfer Library: World Languages (IWL 1912)

Prerequisite: SP 102 or its equivalent.
202 Intermediate Spanish 2 (3) Core Transfer Library: World Languages (IWL 1913)

Prerequisite: SP 201 or its equivalent.
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.
302 Composition and Grammar (3) Extensive practice in written Spanish with focused review and application of grammatical structures.

Prerequisite: SP 202.
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).

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).

335 Topics in Hispanic Cultures (3-6) 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.

## 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.
338 Spanish for Professions (3-6) 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.

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.
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.
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.
400 Spanish Study Abroad (3-9) 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.
403 Seminar in Cultural and Literary Studies (3-9) 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.

404 Seminar in Language, Linguistics, and Culture (3-9) 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.

498 Readings (1-9) 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.

## bsu.edu/nrem

The Department of Natural Resources and Environmental Management prepares students for various career tracks related to demand for natural resources in modern society and the management of the environment to reduce risk factors related to human health and safety.

The programs offered by the department are designed to give students a basic scientific understanding of physical, biological, social, and political aspects of natural and managed systems. The department offers a major in natural resources and environmental management, and various minors, such as emergency management and homeland security, energy, environmental management, international resource management, and natural resources.

Students majoring in natural resources and environmental management choose one of the following concentrations: environmental management or natural resources. All majors must complete a common core track of required courses. To ensure that students are meeting their degree requirements, majors and minors should have advising appointment frequently in their program.

Facilities consist of teaching and research laboratories, lecture and discussion classrooms, a computer lab, and outdoor areas in association with the Ball State Field Station properties. All classrooms and laboratories are accessible to students with disabilities. Students have opportunities to use modern laboratories and equipment, conduct research and support resource conservation practices on field properties, attend workshop classes leading to professional certification, and participate in offcampus service learning activities.

Students are given opportunities to participate in experiential and immersive courses as well as internships (professional practice) under the supervision of faculty members and professionals working in governmental agencies, private industry, or nonprofit environmental organizations.

Those interested should contact the department chairperson for additional details about the program.

## MAJOR IN NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT (BA/BS), 60-62 credits

## PREFIX NO SHORTTITLE CREDITS

Core foundation, 8 credits
CHEM 111 General Chemistry $1 \quad 4$
NREM 101 Environment and Society 3
201 Undergraduate Seminar
Core requirements, 18 credits
NREM 211 Water Resources
221 Soil Resources
241 Air Resources
3
286 Computer Quant Applications (3)
or
372 Applied Research Methods (3)
331 Energy and Mineral Resources
405 Integrated Resource Management (3)
or
Any TIER 3 (UCC) (3) 3
26 crs
Before enrolling in NREM 211, 221, 241, or 286, students must have credit in MATH 108 or 111 or 112 or 132 or 161 or 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 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.

Complete 1 of 2 of the following concentrations
Environmental management concentration, 36 credits
BIO 111 Principles of Biology 14

313 Microbiology (4)
or
CHEM 231 Organic Chemistry 1 (4)
112 General Chemistry 2

Students must complete either

- 24 credits from two of the following clusters or
- 15 credits from one cluster, plus 9 credits of electives approved by advisor or chairperson or
- 15 credits from one cluster, plus a minor approved by advisor or chairperson.

Related clusters
Environmental remediation
EMHS 350 Haz Mat Health and Safety (3)
NREM 346 Indoor Environmental Quality (3)
347 Occupational Indust Hygiene (3)
442 Air Quality Management (3)
487 Solid and Hazardous Waste Mgt (3)
488 Site Assessment Remediation (3)
Emergency response
EMHS 350 Haz Mat Health and Safety (3)
351 Intro Emergency Management (3)
352 Science WMDs Technol Hazards (3)
353 Arson Investigation (3)
355 International Domestic Terror (3)
389 Emergency Response WMDs (3)
469 Professional Practice (1-6)
493 Special Topics (1-6)

Soil and water conservation

| NREM | 304 | Sustainable Agriculture (3) |  |
| :--- | :--- | :--- | :--- |
|  | 320 | Wetland Characterization (3) |  |
|  | 324 | Soil Classification Interpret (3) |  |
| 357 | Internat Community Development (3) |  |  |
|  | 372 | Applied Research Methods (3) |  |
| 385 | Wastewater Management (3) |  |  |
| 415 | Water Quality Management (3) |  |  |
| 422 | Soil Quality (3) |  |  |
| 427 | Soil Conservation and Mgmt (3) | 24 |  |
|  |  |  | 62 crs |

The following courses may be substituted for those in the clusters above with approval of the academic advisor or department chairperson.
EMHS 299X Experimental Develop Topics (1-3)
NREM 299X Experimental Develop Topics (3-6)
369 Professional Practice (1-3)
390 Honors Colloquium in Nat Res (1-3)
402 Field Study (1-6)
490 Community Engagement in NREM (3)
491 Environmental Readings (1-3)
497 Special Studies (1-3)
NREM 402 has a limit of 3 credits.
Natural resources concentration, 34 credits
BIO 112 Principles of Biology 2
216 Ecology (3)
or
220 Ecological Issues 21 ${ }^{\text {st }}$ Century (3)
NREM 203 Decision-Making in Nat Res Mgt
Students must complete either

- 24 credits from two of the following clusters or
- 15 credits from one cluster, plus 9 credits of electives approved by advisor or chairperson or
- 15 credits from one cluster, plus a minor approved by advisor or chairperson.


## Related clusters

Recreation and interpretation
NREM 204 American Environmental History (3)
369 Professional Practice (1-3)
371 Outdoor Recreation and Socy (3)
392 Environmental Interpretation (3)
395 Teaching Environmental Ed (3)
401 Forest Plan (3)
473 Outdr Recreation Plan and Adm (3)
477 Wilderness and Society (3)
Sustainable development
NREM 205 Internatnl Natural Resources (3)
304 Sustainable Agriculture (3)
307 Env Mgt Developing Countries (3)
309 Human Dimensions Global Change (3)

335 Renewable Energy Sustain Tech (3)
357 Internat Community Development (3)
Soil and water conservation
NREM 304 Sustainable Agriculture (3)
320 Wetland Characterization (3)
324 Soil Classification Interpret (3)
357 Internat Community Development (3)
372 Applied Research Methods (3)
385 Wastewater Management (3)
415 Water Quality Management (3)
422 Soil Quality (3)
427 Soil Conservation and Mgmt (3)
60 crs
NREM 372 may not be counted twice if taken as a core requirement.

The following courses may be substituted for those in the clusters above with approval of the academic advisor or department chairperson.
NREM 299X Experimental Develop Topics (3-6)
369 Professional Practice (1-3)
390 Honors Colloquium in Nat Res (1-3)
402 Field Study (1-6)
490 Community Engagement in NREM (3)
491 Environmental Readings (1-3)
497 Special Studies (1-3)
NREM 402 has a limit of 3 credits.

## MINOR IN EMERGENCY MANAGEMENT AND HOMELAND SECURITY, 24 credits

PREFIX NO SHORTTITLE CREDITS

| CS | 110 | Intro Comp Sci and Web Prog | 3 |
| :--- | :--- | :--- | :--- |
|  | 203 | Intro to Computer Security | 3 |
| EMHS | 351 | Intro Emergency Management | 3 |
|  | 352 | Science WMDs Technol Hazards | 3 |

Electives, 12 credits from
At least 3 credits from each of the following groups:
Group 1: Hazards
EMHS 350 Haz Mat Health and Safety (3)
353 Arson Investigation (3)
355 International Domestic Terror (3)
493 Special Topics (1-6)
GEOL 416 Geology Hazards Environment (3)
METC 334 Atmospheric Hazards (3)

Group 2: Planning and policy
GEOG 265 Intro Geographic Info Systems (3)
JOUR 261 Principles of Public Relations (3)
PLAN 439 Community Facilities Planning (3)
POLS 345 National Defense Policy (3)
494 Politics of Terrorism (3)

| RMI | 270 | Principles of Risk Mgt and Ins (3) |
| :--- | :--- | :--- |
|  |  |  |
| Group 3: Applied emergency-related courses |  |  |
| EMHS | 389 | Emergency Response WMDs (3) |
|  | 469 | Professional Practice (1-6) |
| HSC | 250 | Emergency Health Care (3) |
| METC | 450 | Mesoscale Meteorology (3) |
| Other relevant courses may substitute. |  |  |
| See program director regarding approval. |  |  |

24 crs
EMHS 299X (1-3) Experimental Develop Topics may be substituted for any course with the program director approval.

This minor is not available to students in the natural resources and environmental management major with EMHS cluster.

## 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.

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
|  |  |  | 3 |
| NREM | 331 | Energy and Mineral Resources | 3 |
|  | 335 | Renewable Energy Sustain Tech | 3 |
| 3 credits from |  |  |  |
| GEOL | 101 | Planet Earth Geol Environment (3) |  |
| NREM | 101 | Environment and Society (3) |  |
| PHYC | 100 | Conceptual Physics (3) | 3 |
|  |  |  |  |
| 12 credits from the following groups with at least one |  |  |  |
| course from each: |  |  |  |
| Group 1 |  |  |  |
| APHY | 420 | Solar Thermal Systems (3) |  |
|  | 422 | Photovoltaics (3) |  |
| GEOL | 207 | Environ Geology Geochem Cycles (3) |  |
|  | 435 | Sequence Stratigraphy (3) |  |
| NREM | 241 | Air Resources (3) |  |
|  | 346 | Indoor Environmental Quality (3) |  |
| Group 2 |  |  |  |
| LA | 471 | Sustainable Land Systems (3) |  |
| NREM | 405 | Integrated Resource Management (3) |  |
| PLAN | 431 | Urban Transportation Planning (3) |  |
|  | 433 | Environmental Planning (3) |  |
| TCST | 435 | Energy Planning (3) |  |
| TDPT | 252 | Building Diagnostics (3) | Energy Processing (3) |
|  |  |  |  |


| BUSA | 300 | Int Sustainability in Business (3) |
| :--- | :--- | :--- |
| CAP | 498 | Spec Projects in CAP (3) |
| ECON | 311 | Environmental Economics (3) |
|  | or |  |
| NREM | 203 | Decision-Making in Nat Res Mgt (3) |
|  | 402 | Field Study (1-6) |
|  | 497 | Special Studies (1-3) |
| POLS | 342 | Problems in Public Policy (3) |
|  | 347 | Environmental Law and Policy (3) |

Advisor approval required for topic of CAP 498, NREM 497, or 402 (maximum of 3 credits applicable). Students electing APHY 420 or NREM 405 are expected to meet the course prerequisites.

## MINOR IN ENVIRONMENTAL MANAGEMENT, 22 credits



Maximum of 3 credits in NREM 402 is applicable to the minor with permission of the department chairperson.

## MINOR IN INTERNATIONAL RESOURCE MANAGEMENT, 21 credits

PREFIX NO SHORT TITLE
CREDITS

| NREM | 101 | Environment and Society (3) |  |
| :---: | :---: | :---: | :---: |
|  | or |  |  |
|  | 205 | Internatnl Natural Resources (3) | 3 |
| 9 credits from |  |  |  |
| NREM | 307 | Env Mgt Developing Countries (3) |  |
|  | 309 | Human Dimensions Global Change (3) |  |
|  | 357 | Internat Community Development (3) |  |
|  | 372 | Applied Research Methods (3) | 9 |
| 9 credits from |  |  |  |
| ANTH | 111 | Anth, Cult, and Globalization (3) |  |
|  | 312 | Ecological Dims of Culture (3) |  |
|  | 321 | Social Organization (3) |  |
|  | 481 | Cult, Econ, and Dev (3) |  |
| ECON | 279 | Problems of Emerging Nations (3) |  |
| FIN | 352 | Global Finance (3) |  |
| GEOG | 150 | Global Geography (3) |  |
|  | 261 | Tourism Systems (3) |  |
|  | 262 | Tourism Regions (3) |  |
|  | 351 | Latin American and Caribbean (3) |  |
|  | 354 | Geography of Asia (3) |  |
| HIST | 198 | Non-Western Civilizations (3) |  |
|  | 371 | Tradition and Chng Modern Asia (3) |  |
|  | 372 | Africa Since 1500 (3) |  |
|  | 373 | History of the Middle East (3) |  |
| INTB | 265 | Intro to International Bus (3) |  |
| MGT | 241 | The Entrepreneurial Experience (3) |  |
| NREM | 304 | Sustainable Agriculture (3) |  |
|  | 331 | Energy and Mineral Resources (3) |  |
|  | 402 | Field Study (1-6) |  |
| PHIL | 310 | African Philosophy (3) |  |
| PLAN | 100 | Intro Urb Planning and Dev (2) |  |
|  | 365 | Econ Dev in Planning (3) |  |
|  | 433 | Environmental Planning (3) |  |
| POLS | 281 | Econ Pol Prob of Emerg Ntns (3) |  |
| RELS | 160 | Intro to Religion in Culture (3) |  |
|  | 390 | Adv Study of Asian Religions (3) |  |
| SOC | 320 | Social Inequality (3) |  |
|  | 328 | Global and the Social World (3) |  |
| SUST | 400 | Creating a Sustainable Future (3) | 9 |

21 crs
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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| NREM | 101 | Environment and Society | 3 |
| 6 credits from   <br> NREM 211 Water Resources (3) |  |  |  |

12 credits from

Decision-Making in Nat Res Mgt (3)
American Environmental History (3)
Internatnl Natural Resources (3)
Computer Quant Applications (3)
Sustainable Agriculture (3)
Env Mgt Developing Countries (3)
Human Dimensions Global Change (3)
Wetland Characterization (3)
Soil Classification Interpret (3)
Renewable Energy Sustain Tech (3)
Internat Community Development (3)
Professional Practice (1-3)
Outdoor Recreation and Socy (3)
Applied Research Methods (3)
Environmental Interpretation (3)
Teaching Environmental Ed (3)
Field Study (1-6)
Water Quality Management (3)
Soil Quality (3)
Soil Conservation and Mgmt (3)
Wilderness and Society (3)
Special Studies (1-3)
21 crs
Maximum of 3 credits in NREM 402 is applicable to the minor with permission of the department chairperson.

## EMERGENCY MANAGEMENT AND HOMELAND SECURITY (EMHS)

299X Experimental/Developmental Topics (1-3) Topics relevant to emergency management and homeland security. Course titles will be announced before each semester.

A total of 3 credits may be earned.
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.

## 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.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.

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.

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.

389 WMD Awareness and Response (3) Awareness of toxicological effects and treatment of biological, chemical, radiological, nuclear, and explosive agents (WMDs). Emergency response to domestic incidents. The Incident Command System. Selection and proper use of chemicallyprotective clothing. Decontamination principles.

Open only to juniors and seniors.
469 Professional Practice (1-6) Supervised experience in emergency planning and management, science of hazards, and/or cyber security. Connects academic with professional experiences.

Prerequisite: EMHS 351, 352; permission of the department chairperson.

A total of 6 credits may be earned.
Open only to juniors and seniors.
493 Special Topics (1-6) 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.

## NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT (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.

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.

## 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.

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.

## 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.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.

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.

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.

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.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
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.

## 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.

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.

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.

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.

## 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.

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. Problemsolving applications using various approaches.

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.

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.

## 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.

369 Professional Practice/Experiential Learning (1-3)
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.
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.

## 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.

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.

## 390 Honors Colloquium in Natural Resources (1-3)

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.

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.

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.

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.
402 Field Study (1-6) 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.
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.

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.

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.

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.

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.
473 Outdoor Recreation Planning and Administration (3) Application of basic principles and procedures for the planning and administration of resource-based and activitybased recreation areas. May require one weekend field trip as well as in-class field trips.

Prerequisite: NREM 371 or permission of the department chairperson.

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.

## 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.

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.

## 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.

491 Environmental Readings (1-3) Individual or smallgroup discussions relevant to natural resources or environmental studies/sciences/management.

Prerequisite: NREM 101 or equivalent.
A total of 3 credits may be earned.

## 497 Special Studies in Environmental and Natural

Resource Sciences (1-3) 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.

## PHILOSOPHY AND RELIGIOUS STUDIES

D. Concepcion, 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

PREFIX NO SHORT TITLE CREDITS
PHIL 200 Symbolic Logic
3

6 credits from
PHIL 203
210
230
235
240 Society, Discipline, \& Control (3)


One RELS course (must be at 300 -level or above)

## 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)

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.

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.

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)

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.

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)

230 Environmental Ethics (3) Introduction to and analysis of basic concepts, principles, theories, and issues in environmental ethics.

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.
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.

299X Experimental/Developmental Topics (3-6) 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.

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.

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.

303 American Philosophy (3) A survey of American philosophy from colonization to the present with particular attention to pragmatism. Multi-cultural perspectives typically addressed.

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, sportspersonship, violence, racial and gender equity, ergogenic aids, nonhuman animals in sports, sports on the college campus, and the broader relation of sport to society.

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.

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.

310 African Philosophy (3) A critical examination of leading trends in African philosophy. Ethnophilosophy, philosophic sagacity, liberation philosophy, or modern/critical philosophy are possible topics.

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.

320 Emotions, Character, and Moral Responsibility (3) Examines 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.

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.
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.

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.

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.

400 Immersive or Experiential Learning (1-6) 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.

403 Reading and Special Study (1-6) 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.
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.

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.
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.

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.

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.

## RELIGIOUS STUDIES (RELS)

160 Introduction to Religion in Culture (3) An introduction to the academic study of religion, including the dynamic interaction between religious ideas, practices, and broader cultural contexts. Specific traditions and cultural contexts addressed in the course will vary according to instructor, but all students will gain an understanding of diverse components of, and methods for studying religion.

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.

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.

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.

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.

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.

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.

## 299X Experimental/Developmental Topics (3-6) 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.

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.

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.

380 Religion and Ethics (3) Critical examination of traditions of religious thought and ethics, with focus on a select topic, such as philanthropy and justice, human rights, war and nonviolence, or the environment.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

390 Advanced Study of Asian Religions (3) Critical examination of one or more Asian religions. Topics include sacred texts, historical developments, prominent figures, and relevance to contemporary cultural formations. Counts for minor in Asian Studies.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

403 Reading and Special Study (1-6) 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.

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.

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.

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.

# PHYSICS AND ASTRONOMY 

## J. Bryan, Chairperson <br> bsu.edu/physics

## Physics Major Concentrations, Physics Teaching, Pre-Engineering Preparation, Astronomy and Minors in Physics, Applied Physics, Astrophysics and Introductory Astronomy <br> The Department of Physics and Astronomy offers two concentrations for majors in physics, a major in physics teaching, preengineering preparation, and astronomy as well as several programs for minors in astronomy and/or physics. For majors, the general physics concentration is a course of study for those students who intend to pursue graduate work or industrial careers in physics, astronomy, or engineering. The applied physics concentration is for those students who are primarily interested in careers in industry. 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 new 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 and middle school science, but additional science courses are recommended for students who wish to teach middle school science.

## MAJOR IN ASTRONOMY (BA/BS), 66-67 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| Common core, |  |  |  |
| Co credits |  |  |  |
| ASTR | 120 | The Sun and Stars |  |
|  | 122 | Stel Evol, Galaxies, and Cosmo | 3 |
|  | 330 | Astronomy and Astrophysics 1 | 4 |
|  | 332 | Astronomy and Astrophysics 2 | 4 |
|  | 386 | Adv Observational Astronomy | 3 |
|  | 380 | Topics in Modern Astronomy (2) | 4 |
| MATH | 165 | Calculus 1 | 4 |
|  | 166 | Calculus 2 | 4 |
|  | 267 | Calculus 3 | 4 |
| PHYC | 115 | Career Issues | 1 |
|  | 120 | General Physics 1 | 5 |


| 122 | General Physics 2 | 5 |
| :--- | :--- | :--- |
| 260 | Introduction to Modern Physics | 4 |
| 330 | Mechanics | 3 |
| 464 | Intro to Quant Mech | 3 |
| 483 | Seminar in Physics (1-2) | 2 |
| 485 | Meas of Lrnng in Physics | 1 |

3 credits from
PHYC 369 Professional Experience (1-3)
or
479 Practical Experience (1-3)
or
482 Independent Studies in Physics (1-3)
or
HONR 499 Senior Honors Project (3) 3


Concentration 2: Physics (applied), 14 credits
PHYC 354 Electronics $1 \quad 4$
356 Electronics 24

Electives from departmental courses as approved by the student's departmental advisor and the department chairperson

Electives from departmental courses as approved by the student's departmental advisor and the department chairperson

65-67 crs
Other APHY, ASTR, and PHYC courses at the 300-level and above, with the approval of the student's departmental advisor and the department chairperson, may be applied to all concentration areas.

## MAJOR IN PRE-ENGINEERING PREPARATION

 (BA/BS), 63 creditsTo 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

$\overline{50 \mathrm{crs}}$
Students who currently hold or are pursuing a secondary license in one of the following areas will not be required to complete the high school physics concentration area: chemistry, earth/space science, life science, mathematics.

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| Professional education sequence, 39 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed |  |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 380 | Princ of Tchng in Sec School | 3 |
| SCI | 150 | Bsc Con in Science Education | 3 |
|  | 295 | Intro to the Teaching of Sci | 3 |
|  | 396 | Using Sci Methods and Mats | 3 |
| Student teaching | 12 |  |  |
|  |  |  | 39 crs |
|  |  | 89 crs |  |

See Professional Education Assessment/Decision Points, p. 389, for additional information.

## 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.

## 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.

315 Medical Physics 1 (3) Biomechanics, statistical physics, bioelectric fields, biomagnetic fields, electricity and magnetism at the cellular level.

Prerequisite: PHYC 112 or 122.

Prerequisite recommended: BIO 111, 215; MATH 165, and 166.

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 or instructor.

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.
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.

## 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)

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.

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.
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.
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.
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.

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.

200 Topics in Astronomy (1-3) 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.
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.
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 systemsare surveyed, and astronomical instruments are discussed.

Prerequisite: PHYC 120, 122.
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.
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.

## 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.
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.

## 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)

## 101 Physical Science Concepts for Teachers (1-3)

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.

## 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.

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.

## 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.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.

## 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.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 140.
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.
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.
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.
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.
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.
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.

200 Topics in Physics (1-3) 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.
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.
262 Modern Physics Laboratory (1) 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.

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.
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.

340 Physical Optics (3) The electromagnetic wave theory of light, spectra, interference, diffraction, polarization, and double refraction.

Prerequisite: PHYC 122.
346 Acoustics (3) Elements of pure and applied acoustics. Topics include solutions to the wave equation, acoustic impedances, electro-mechanical-acoustic analogies, directradiator loudspeaker and enclosure theory, and a discussion of room acoustics.

Prerequisite: PHYC 122.
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.

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.

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.
369 Professional Experience (1-3) 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.
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.

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.

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.

390 Honors Colloquium in Physics (1-3) 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.

## 396 The Teaching of Physics in the Secondary School

(1-3) 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.

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.

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.
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.
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.
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.
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.
465 Quantum Mechanics (3) Review of barrier problems, the harmonic oscillator, and angular momentum using matrix methods. Problems involving perturbation theory, oneelectron atoms, magnetic moments, spin, relativistic effects, symmetric and anti-symmetric wave functions, the helium atom, transition rates, and scattering theory.

Prerequisite: PHYC 464.
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.

## 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.
479 Practical Experience (1-3) 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.
482 Independent Studies in Physics (1-3) 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.

483 Seminar in Physics (1-2) 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.
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.

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. 35, or contact the Political Science department at 765-285-8780.

## MAJOR IN POLITICAL SCIENCE (BA/BS), 42-53 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.

All students will be required to take the Major Field Exam in Political Science before graduation.

## PREFIX NO SHORT TITLE <br> CREDITS

$\begin{array}{lll}\text { POLS } & 130 & \text { American National Government } \\ & 210 & \text { Pol Sci Res Methods }\end{array}$
Language requirement
The major requires intermediate proficiency in a major language (Chinese, French, German, Japanese, or Spanish) or a major classical language (Greek or Latin) by earning advanced placement or enrolling in and passing one course at the 200 level or above. Modern language courses taught in English are excluded. To enroll in 200-level language courses, students must achieve appropriate placement scores or complete prerequisite 100-level courses.

## Concentration 1: Political science, 33 credits

15 credits from
POLS 237 State and Local Politics (3)
280 Comparative Political Systems (3)
293 International Relations (3)
312 Early West Pol Thought (3)
or
313 Mod West Pol Thought (3)
342 Problems in Public Policy (3)
350 Public Administration (3)
3 credits from senior capstone
POLS 369 Pd Prof Exp Amer Gov and Law (3)
404 Sr Thes in Gov and Pols (3)

479 Pract Exp Amer Gov and Law (3)
499 Sr Seminar in Gov and Pols (3)
15 credits from POLS (minimum of 12 credits in 300and 400-level courses excluding 312, 342, 350)
$42-50 \mathrm{crs}$
Concentration 2: Economics, 33 credits
15 credits from
POLS 237 State and Local Politics (3)
280 Comparative Political Systems (3)
293 International Relations (3)
312 Early West Pol Thought (3)
or
313 Mod West Pol Thought (3)
342 Problems in Public Policy (3)
350 Public Administration (3)
3 credits from senior capstone
POLS 369 Pd Prof Exp Amer Gov and Law (3)
404 Sr Thes in Gov and Pols (3)
479 Pract Exp Amer Gov and Law (3)
499 Sr Seminar in Gov and Pols (3)
9 credits from any 300- and 400-level POLS electives
(excluding 312, 342, 350)
6 credits from
ECON 311 Environmental Economics (3)
331 Labor Economics (3)
345 Public Finance (3)
346 Law and Economics (3)
348 Health and Economics (3)
351 International Economics (3)
370 Industrial Organization (3)
371 Econ Games Stgy (3)
$42-53 \mathrm{crs}$
ECON 201, Elementary Microeconomics, is the prerequisite for each of the above ECON electives.

Concentration 3: International studies, 33 credits 15 credits from

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.
237 State and Local Politics (3) Politics, policies, and structures of state and local governments in the United States.

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.

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 servicelearning hours volunteering with a community partner organization that deals with issues of family law.

Prerequisite: permission of the department chairperson or legal studies coordinator.

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.

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: permission of the department chairperson or legal studies coordinator.

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.

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.

## 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.

Prerequisite recommended: POLS 280.
Not open to students who have credit in ECON 279.
290 American Foreign Policy (3) An introduction to the process of making United States foreign policy, American strategic doctrines, and major foreign policy issues.

Prerequisite recommended: POLS 130.
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)

312 Early Western Political Thought (3) Analysis of political thought of the early Mediterranean and medieval worlds that became the foundation of modern political theories and systems of the West. Emphasis on the writings of Plato, Aristotle, Augustine, Aquinas, and Machiavelli.

313 Modern Western Political Thought (3) Review and analysis of selected writings of theorists in the modern era from the age of reason to the beginning of the post-modern age.

Prerequisite recommended: POLS 312.
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.
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.

Prerequisite recommended: POLS 130.
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.

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.

Prerequisite recommended: POLS 130.
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.

Prerequisite recommended: POLS 130.
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.

Prerequisite recommended: POLS 130.

## 369 Paid Professional Experience in American

Government and Law (3) Paid part- or full-time experience for one or more semesters in the office of a public official; a political party; or private firm or organization. Assignments depend upon the interest of the student and convenience of the sponsors.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.
Prerequisite recommended: POLS 130.
371 Public Interest Groups and Government (3) Overview of the power and impact interest groups have on public policy in the United States.

Prerequisite recommended: POLS 130.
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.
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.
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.

Prerequisite recommended: POLS 130.
382 Governments and Politics of Western Europe (3) A comparative analysis of the political processes, governmental institutions, and policy performances of Britain, France, Germany, and Italy. Their roles as national actors in the process of European integration are also considered.

Prerequisite recommended: POLS 280.
384 British Government and Politics (3) Study of the political system of the United Kingdom-its political culture, parties and groups, governmental institutions, and policy problems. Comparisons with the United States and Canada are considered.

Prerequisite recommended: POLS 280.
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.

Prerequisite recommended: POLS 280.
386 Politics of Russia and the Successor States (3)
Evaluation of political, economic, and social change and performance in Russia and other successor states of the former Soviet Union. Historical and geographical factors are also treated.

Prerequisite recommended: POLS 280.

## 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.

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.

Prerequisite recommended: POLS 293.
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.

Prerequisite recommended: POLS 293.
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 crises, international economic institutions, and the problems of economic development.

Prerequisite recommended: POLS 293.
403 Issues in Political Science (3-6) 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.
404 Senior Thesis in Government and Politics (3) A senior thesis consisting of an undergraduate research paper written under the direction of a faculty member. Required of all majors who do not have credit in POLS 369 or 479 or 499.

Not open to students who have credit in POLS 369 or 479 or 499.

Open only to political science majors with senior standing and permission of the department chairperson.

405 Reading and Special Study (3-6) 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.

407 Workshop in Political Science (3) Intensive study of selected problems in political science.

Prerequisite: permission of the department chairperson.
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.

411 American Political Thought (3) American political thought from the colonial period to the present. Includes the study of Puritanism, nature of rights, constitutionalism, federalism, democracy, liberalism, and conservatism.

Prerequisite: POLS 130 or permission of the department chairperson.

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.

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.

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.

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.

435 Intergovernmental Relations (3) Analysis of relations among national, state, and local governments. Considerations of constitutional and legal bases and the nature of relations, such as grants-in-aid, tax immunity, education, and interstate compacts.

Prerequisite: POLS 237 or permission of the department chairperson.

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.

438 Metropolitan Problems (3) Analysis of the problems of cities and metropolitan areas.

Prerequisite: POLS 130 or 238 or permission of the department chairperson.

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.

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.

## 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.
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.

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.

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.

## 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.

## 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 350 or permission of the department chairperson.

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.

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.

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.

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.

## 479 Practical Experience in American Government and

Law (3) Unpaid part- or full-time assignment for one or more semesters in the office of a public official in national, state, or local government; a candidate for political office; a political party; or private firm or organization. Assignments depend upon the interest of the student and convenience of the sponsors.

Prerequisite: political science majors and minors, POLS 130, 237, and one from $342,350,431$, or 473 . For legal studies majors, POLS 344; permission of department chairperson or program coordinator.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.
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.

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.

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.

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.

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.

499 Senior Seminar in Government and Politics (3) A senior research seminar on one of the major themes in political science. Students explore in-depth topics of particular interest. Required of all majors who do not have credit in POLS 369 or 404 or 479.

Not open to students who have credit in POLS 369 or 404 or 479.

Open only to political science majors or minors with senior standing and permission of the department chairperson.

## 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 utilize the services of the department's advising center and consult with their faculty advisor regarding course selection. Their faculty advisor may also be helpful in choosing a minor that will further their professional and personal objectives.

Students interested in teaching psychology at the high school level may complete a social studies major with a concentration in psychology. Psychological science teaching majors are also encouraged to take advantage of the resources available in the department's advising center.

To declare a major in psychological science, students must complete PSYS 100 with a grade of $C$ or better, PSYS 241 with a grade of $C$ or better, and have a minimum GPA of 2.0 in all completed PSYS courses. Students who have not met these requirements will be considered pre-majors.

## MAJOR IN PSYCHOLOGICAL SCIENCE (BA/BS), 39 credits

## PREFIX NO SHORT TITLE

PSYS 100 Intro to Psychological Science 3
241 Statistics
284 Research Methods in Psych Sci
295 Career Planning in Psych
385 Professl Ethics in Psychology

3 credits from

| PSYS | 316 | Social Psychology (3) |  |
| :--- | :--- | :--- | :---: |
|  | 317 | Personality (3) |  |
|  | 321 | Developmental Psychology (3) |  |
|  | 432 | Abnormal Psychology (3) |  |
|  |  |  |  |
| 3 credits from |  |  |  |
| PSYS | 364 | Psychology of Learning (3) |  |
|  | 371 | Applied Behavior Analysis (3) |  |
|  | 416 | Cognitive Psychology (3) |  |

3 credits from
PSYS 324
325 Psych Prejudice Discrimination (3)
424 Psychology of Diversity (3)
3 credits from
PSYS 362
367 Introduction to Neuroscience (3)
412 Sensation and Perception (3)
3 credits from
PSYS 492
499 Depart Honors in Psychology (1-2)

6 credits at 300- or 400-level PSYS
(no more than 3 credits from PSYS 478, 479, 497, or 498)

6 credits at 400-level PSYS
(no more than 3 credits from PSYS 478, 479, 497, or 498)

To declare a major in psychological science, students must complete PSYS 100 with a grade of $C$ or better, PSYS 241 with a grade of $C$ or better, and have a minimum GPA of 2.0 in all completed PSYS courses. All students will be required to take major field exam in psychology before graduation.

## TEACHER EDUCATION

## TEACHING MAJOR IN SOCIAL STUDIES (BA/BS), 99 credits

(See Teaching Major in Social Studies, College of Sciences and Humanities, p. 262, for total requirements for this area.)

PREFIX NO SHORT TITLE CREDITS
Psychology concentration, 15 credits
Refer to the Department of Psychological Science listings, p. 376, for descriptions of these courses.

PSYS 100 Intro to Psychological Science 3
493 Teaching Psychology $1 \quad 1$
494 Teaching Psychology 2
3 credits from

| PSYS | 367 | Introduction to Neuroscience (3) |
| :--- | :--- | :--- | :--- |
|  | 468 | Cognitive Neuroscience (3) |

3 credits from
PSYS 362 Motivation and Emotion (3)
364 Psychology of Learning (3)
416 Cognitive Psychology (3)
3 credits from
PSYS 316 Social Psychology (3)
317 Personality (3)
324 Psychology of Women (3)
432 Abnormal Psychology (3)

Each student's program of study must include at least one of the following courses: PSYS 416, 432, or 468. Each student must satisfactorily complete a Psychological Science Teacher Education Portfolio in accordance with the standards published by the department.

## 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)

213 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.

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.

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 $C$.
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 with minimum grade of $C$.
Open only to psychological science pre-majors and psychological science majors.

301 Health Psychology (3) Examines how psychological conditions influence disease prevention, medical treatment, stress and coping, and psychosocial adjustment to illness.

Prerequisite: PSYS 100.
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.
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.
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.
324 Psychology of Women (3) Explores both biological and social influences on women's experiences, behavior, selfconcepts, 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.

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.
342 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.
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.
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.
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.
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.
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.
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.
385 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 and 295; a minimum of 6 additional credits in psychology.

Open only to juniors and seniors and only to psychological science majors.

395 Special Topics in Psychology (1-9) 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.

396 Seminar for Teaching Assistants (1) This seminar is designed for students who are serving as first-time teaching assistants for psychological science courses. The seminar will help them integrate their teaching assistantship duties with the pedagogy of the teaching of psychology, including ethical issues and working with a diverse student body.

Prerequisite: PSYS 100 and permission of the instructor.
412 Sensation and Perception (3) Survey of theories, methods, and knowledge concerning sensory physiology, sensation, and perception. Emphasizes studies of people.

Prerequisite: PSYS 100; junior or senior standing.
416 Cognitive Psychology (3) Survey of theories and research about human thought and memory. Topics include attention, memory, problem solving, and language.

Prerequisite: PSYS 100; junior or senior standing.
424 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; junior or senior standing.
432 Abnormal Psychology (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; junior or senior standing.

## 447 Tests and Measures in Psychological Science (4)

Theoretical and practical foundations underlying the construction, use, and interpretation of standardized psychological tests and inventories. Laboratory includes development of a psychological measure.

Prerequisite: PSYS 284.

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.
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.
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.
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.
478 Teaching Assistantship (1-3) Under the supervision of the instructor of a course, students will carry out courserelated duties assigned by the instructor. Students taking this course for the first time must have completed PSYS 396 or be currently enrolled in that course. Offered credit/no credit only.

Prerequisite: PSYS 100; a grade of at least $B+$ in the course in which the student is assisting; permission of the instructor.

Prerequisite or parallel: PSYS 396.
A total of 6 credits may be earned, but no more than 3 in any one semester or term.

No more than 3 credits may be used to meet the requirements of the psychological science major.

Open only to sophomores, juniors, and seniors.
479 Practical Experience (3-6) 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.

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.
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 385 and a minimum of 12 additional credits in psychology.

Open only to senior psychological science majors.
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.

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.

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.
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.

## 497 Supervised Empirical Research Experience (1-3)

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.

## 498 Independent Study in Psychology (1-3) 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.

499 Department Honors in Psychology (1-2) 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 385; a minimum of 12 additional credits in psychology; senior standing; 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.

496 International Studies in Psychology (1-12)
International studies in psychological science at approved

## SOCIOLOGY

## C. Menning, Chairperson <br> 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| SOC | 100 | Principles of Sociology | 3 |
|  | 200 | Sociological Thinking | 1 |
|  | 380 | Sociological Research Methods | 3 |
|  | 382 | Applied Social Statistics | 3 |
|  | 402 | Sociological Theory | 3 |
|  | 492 | Capstone Course in Sociology | 3 |

21 credits of electives in SOC (at least 12 credits must beat the 300-400 level)

Students must earn a grade of $C$ or better in SOC 100, 380, 382, 402, 492 for the course to count toward major requirements.

## MINOR IN SOCIOLOGY, 15 credits

PREFIX NO SHORT TITLE
CREDITS

SOC 100 Principles of Sociology
3
12 credits of electives in SOC (at least 6 credits must be at the 300-400 level)

15 crs

## TEACHER EDUCATION

## TEACHING MAJOR IN SOCIAL STUDIES (BA/BS), 99 credits

(See Teaching Major in Social Studies, College of Sciences and Humanities, p. 262, for total requirements for this area.)

## PREFIX NO SHORT TITLE

CREDITS
Sociology concentration, 15 credits
Refer to the Department of Sociology listings, p. 380, for descriptions of these courses.

SOC 100 Principles of Sociology
6 credits from
SOC 235 Sociology of Gender (3)
242 Social Problems (3)
260 Social Interaction (3)

343 Deviance (3)
6 credits from
SOC 320 Social Inequality (3)

328 Global and the Social World (3)
421 Racial and Cultural Minor US (3)
424 Family (3)
427 Sociology of Religions (3)
470 Population Dynamics (3)

Each student must satisfactorily compile artifacts from sociology courses for the Social Science Teacher Education Portfolio in accordance with department standards.

## 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)

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.
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.

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.

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.
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.

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)

260 Social Interaction (3) Analysis of the interaction between people and their social environment. Examines the effects of groups and society on individuals.

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.
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.
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.
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.

329 Work and Society (3) Examines work organization in historical and contemporary societies.

Prerequisite: SOC 100 or permission of the instructor.
333 Sociology of Media (3) Describes, compares, and analyzes national and international media from a sociological perspective. Representations of race, class, and gender will be considered. The social effects of media will also be explored emphasizing the development of media literacy.

Prerequisite: SOC 100 or permission of the instructor.
341 Sociology of Health and IIIness (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.
343 Deviance (3) Overview of theory and research on deviance.

355 Environmental Sociology (3) Addresses the role of social structures as cause, impediment, and solution to environmental and sustainability issues.

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.

380 Sociological Research Methods (3) Examines the basic principles of conducting and analyzing sociological research.

Prerequisite: SOC 100 or permission of the instructor.
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.
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.
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.

## 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.

## 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.

424 Family (3) Advanced topics in the sociology of the family.

Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

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.

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.

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.

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.

434 Sociology of Human Sexuality (3) Analyzes gender and sexual issues. Topics include gender identity, sexual deviance, and sociological factors that affect sexuality.

Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

441 Social Change (3) Analyzes social movements and resistance to these movements.

Prerequisite: SOC 100 plus 6 SOC credits, or permission of the instructor.

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.

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.

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.

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.

490 Independent Study of Sociology (1-3) 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.

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.

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.

## 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| WGS | 210 | Intro Womens and Gender Stud | 3 |
|  | 220 | International Womens Issues | 3 |
|  | 410 | Feminist Theory | 3 |
|  | 499 | Wom and Gender Study Capstone | 3 |
|  |  |  |  |
| Group 1: | WGS electives, 3 credits from |  |  |
| WGS | 310 | Special Topics in WGS (3) |  |
|  | 369 | Paid Internship (1-6) |  |
|  | 479 | Unpaid Internship (1-6) |  |
|  | 498 | Independent Study (1-3) |  |
|  |  |  |  |
| Group 2: Humanities and fine arts electives, |  |  |  |
| 3 credits from |  |  |  |
| AHS | 265 | Feminist Art History (3) |  |
| CC | 302 | Women in Antiquity (3) |  |
| COMM | 385 | Rhet of Marginalized Voices (3) |  |
| ENG | 328 | Language and Gender (3) |  |
|  | 490 | Literature and Gender (3) |  |
|  | 494 | Queer Lit and Queer Theory (3) |  |
| FL | 307 | European Women Writers (3) |  |
| HIST | 215 | Women in American History (3) |  |
|  | 452 | Women Modern European History (3) |  |
| PHIL | 306 | Contemporary Philosophy (3) |  |
| RELS | 206 | Sex and the Bible (3) | 3 |

Group 3: Social and biological sciences electives, 3 credits from
$\begin{array}{lll}\text { ANTH } & 441 & \text { Anthropology of Gender (3) } \\ \text { CJC } & 211 & \text { Race, Gender and Crime (3) }\end{array}$
HSC 261 Health, Sex, and Family Life (3)
372 Women and Health (3)
POLS 241 Family Law (3)
474 Women and Politics (3)
PSYS 324 Psychology of Women (3)
377 Psychology of Sexual Behavior (3)
424 Psychology of Diversity (3)
SOC 235 Sociology of Gender (3)
424 Family (3)
434 Sociology of Human Sexuality (3)
SOCW 250 Human Behav and Social Envr 1 (3) 3
15 additional credits from at least 2 of the groups (at least 12 credits must be at the 300-400 level)

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

PREFIX NO SHORT TITLE CREDITS
WGS 210 Intro Womens and Gender Stud 3
499 Wom and Gender Study Capstone 3
12 credits from

| AHS | 265 | Feminist Art History (3) |
| :--- | :--- | :--- |
| ANTH | 441 | Anthropology of Gender (3) |
| CC | 302 | Women in Antiquity (3) |
| CJC | 211 | Race, Gender, and Crime (3) |
| COMM | 385 | Rhet of Marginalized Voices (3) |
| ENG | 328 | Language and Gender (3) |
|  | 490 | Literature and Gender (3) |
|  | 494 | Queer Lit and Queer Theory (3) |
| FL | 307 | European Women Writers (3) |
| HIST | 215 | Women in American History (3) |
|  | 452 | Women Modern European History (3) |
| HSC | 261 | Health, Sex, and Family Life (3) |
|  | 372 | Women and Health (3) |
| PHIL | 306 | Contemporary Philosophy (3) |
| POLS | 241 | Family Law (3) |
|  | 474 | Women and Politics (3) |
| PSYS | 324 | Psychology of Women (3) |
|  | 377 | Psychology of Sexual Behavior (3) |
| RELS | 424 | Psychology of Diversity (3) |
| SOC | 206 | Sex and the Bible (3) |
|  | 424 | Sociology of Gender (3) |
|  | 434 | Family (3) |
| SOciology of Human Sexuality (3) |  |  |
| SOCW | 250 | Human Behav and Social Envr 1 (3) |
| WGS | 220 | International Womens Issues (3) |
|  | 310 | Special Topics in WGS (3) |
|  | 410 | Feminist Theory (3) |
|  | 498 | Independent Study (1-3) |
|  | 369 | Paid Internship (1-6) |
|  | or |  |

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.

## WOMEN'S AND 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.

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.

## 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.

369 Paid Internship (1-6) 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, with appropriate monetary compensation.

Prerequisite: WGS 210; permission of the Women's and Gender Studies program director.

A total of 6 credits may be earned.
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.

479 Unpaid Internship (1-6) 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.
498 Independent Study (1-3) 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.
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.

## TEACHERS COLLEGE

R. Weaver, Interim Dean; S. Stump, Interim Associate Dean; A. Welch, Associate Dean

## bsu.edu/teachers

## Teachers College Mission and Vision

Teachers College is committed to excellence in $\mathrm{P}-12$ and adult/higher education through its student-centered and communityengaged 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.

Teachers College seeks to fulfill this mission through the development and provision of:

- outstanding programs for the preparation of professional educators and human service providers;
- an institutional system of performance assessment for professional educators;
- significant and meaningful experimentation and innovation;
- exemplary demonstration and research opportunities for P-12 education professionals;
- outstanding models for professional development schools and collaborative school renewal efforts;
- high quality programs and services for exceptional learners and individuals with special needs;
- an array of educational and human resource services aimed at improving the quality of life for citizens;
- strategies for effective and appropriate uses of technology;
- meaningful international and multicultural experiences and opportunities;
- an outstanding and diverse faculty of teacher-scholars.

Teachers College programs are designed to produce professional educators and human service providers who:

- understand how learners grow and develop and can design and implement developmentally appropriate learning experiences;
- understand the learning needs of each individual by creating an inclusive environment;
- understand how to create learning environments that actively engage all learners;
- understand the content area and creates experiences that ensure that learners master the content;
- can use critical and creative thinking to connect the content to authentic local and global issues;
- can effectively monitor the learner's progress using multiple methods of assessment;
- can effectively plan instruction that is rigorous, relates to the context in the community, and is in collaboration with others to ensure alignment with the curriculum;
- understand the need to apply a variety of instructional strategies;
- understand the value of self-assessment and problem for continuous improvement in their practice;
- understand the need to include the larger school community, and can adopt to multiple environments;
- seek opportunities to lead by collaboration with the larger school community in ways that enhances student learning and advances the profession.


## Professional Education

For elementary education and early childhood education, see the listing for the Department of Elementary Education.
For senior high, junior high, and middle school education, see the listing for the Department of Educational Studies.
For all-grade education in music education, health and physical education, and visual arts, see the listing for the Department of Educational Studies.

For special education, hearing impaired/deaf, applied behavior analysis, and autism see the listing for the Department of Special Education.

## Concentration Areas

For elementary education and early childhood education, the teaching major requirements are given in the statement of the Department of Elementary Education, and licensing coverage is given in the Teacher Licensing section.

For senior high, junior high, and middle school teaching, a teaching major is required. (Area requirements are given in the statements of the departments of instruction, and licensing coverage is given in the Teacher Licensing section.)

For all-grade education, an all-grade teaching major is required. (Area requirements are given in the statements of the departments of instruction, and licensing coverage is given in the Teacher Licensing section.)

## Electives

Students must take as many credits in electives as needed to increase the total to 120 .

## INTERDEPARTMENTAL PROGRAMS

DUAL MAJOR IN EARLY CHILDHOOD AND EARLY CHILDHOOD SPECIAL EDUCATION (BA/BS), 113 credits

PREFIX NO SHORTTITLE

| AHS | 100 | Introduction to Art | 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIO | 102 | Biol Concepts for Teachers | 3 | DUAL MAJOR IN ELEMENTARY EDUCATION- |  |  |  |
| EDEL | 200 | Plan for Elem and EC Classroom | 3 | SPECIAL EDUCATION, EXCEPTIONAL NEEDS |  |  |  |
|  | 231 | Family and Community Relations | 3 | (BA/BS), 113-115 credits |  |  |  |
|  | 244 | Early and Elem Educ Soc Just | 3 |  |  |  |  |
|  | 252 | Creative Exp for Yng Children | 3 | PREFIX | NO | SHORT TITLE CR | CREDITS |
|  | 301 | Tchg in the Pre-K K Program | 3 |  |  |  |  |
|  | 351 | Teaching in the K Primary Prog | 3 | BIO | 102 | Biol Concepts for Teachers | 3 |
|  | 381 | Early Childhood Language Arts | 3 | EDEL | 200 | Plan for Elem and EC Classroom | 3 |
|  | 400 | Student Teaching: Pre-K | 6 |  | 244 | Early and Elem Educ Soc Just | 3 |
|  | 401 | Student Teaching: Kindergarten (6) |  |  | 300 | Mgt, Org, and Instr Elem Clsrm | 3 |
|  | or |  |  |  | 311 | Language Arts Methods | 3 |
|  | 402 | Student Teaching: Primary (6) | 6 |  | 350 | Tchg in the Elem Ed Classroom | 3 |
|  | 442 | Administration of EC Programs | 3 |  | 464 | Student Teaching: Elementary | 6 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 | EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDPS | 260 | Development Elementary | 3 | EDPS | 260 | Development Elementary | 3 |
|  | 393 | Educational Psych Elementary | 3 |  | 393 | Educational Psych Elementary | 3 |
| EDRD | 204 | Literature for Children | 3 | EDRD | 204 | Literature for Children | 3 |
|  | 390 | Early Emergent Literacy | 3 |  | 400 | Tchg of Rdg in Todays Schools | 3 |
|  | 430 | Assess Interven Read Lang Arts | 3 |  | 430 | Assess Interven Read Lang Arts | 3 |
| GEOG | 101 | Earth Sea Sky: Geographic View (3) |  | GEOG | 101 | Earth Sea Sky: Geographic View (3) |  |
|  | or |  |  |  | or |  |  |  |
| GEOL | 101 | Planet Earth Geol Environment (3) | 3 | GEOL | 101 | Planet Earth Geol Environment (3) | 3 |
| HIST | 201 | American History, 1492-1876 | 3 | HIST | 201 | American History, 1492-1876 | 3 |
| HSC | 350 | Elem Schl Hlth Prgrms | 3 | HSC | 350 | Elem Schl Hlth Prgrms | 3 |
| MATH | 201 | Num Oper Alg Reas Elem Teach | 4 | MATH | 201 | Num Oper Alg Reas Elem Teach | 4 |
|  | 202 | Data Geo Meas Elem Teach | 3 |  | 202 | Data Geo Meas Elem Teach | 3 |
|  | 391 | Teach Mathematics Elementary | 3 |  | 391 | Teach Mathematics Elementary | 3 |
| MUSE | 265 | Music Basics for the Classroom | 3 | MUSE | 265 | Music Basics for the Classroom | 3 |
| PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3 | PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3) 3 |
| SCI | 398 | Teach Sci in Early Pri Grds | 3 | SCI | 397 | Teach Sci in the Elem Schl | 3 |
| SPCE | 201 | Intro Stdnts with Except Nds | 3 | SPAA | 270 | Language Development | 3 |
|  | 202 | Legal and Proc Founds Spec Ed | 3 | SPCE | 201 | Intro Stdnts with Except Nds | 3 |
|  | 210 | Thry and Pract in EC Spec Ed | 3 |  | 202 | Legal and Proc Founds Spec Ed | 3 |
|  | 215 | Assess Yng Chldrn Exc Nds | 3 |  | 331 | Tech in Special Education | 1-3 |
|  | 311 | Dev Meth Infs and Todds Exc | 3 |  | 361 | Adv Pract in Special Ed (1-6) | 3 |
|  | 312 | Dev Meth PS Chldrn with Exc | 3 | SS | 397 | Teaching SS in the Elemen Schl | 3 |

331 Tech in Special Education (1-3) 1
417 Pract: Inf Tods PS Spec Nds (1-6) 3

SS 398 Teaching SS EC Kind-Grade 3
3
113 crs
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 EDUCATIONSPECIAL EDUCATION, EXCEPTIONAL NEEDS (BA/BS), 113-115 credits

86-88 crs

MILD INTERVENTIONS (EARLY AND MIDDLE CHILDHOOD), 27 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| EDPS | 345 | Tests and Measurement | 3 |
| SPCE | 277 | Hum Rltn, Collab, \& Diversity | 3 |
|  | 309 | Prin of ABA for Spec Ed | 3 |
|  | 371 | Intro to Mild Intervs | 3 |
|  | 375 | Assessment in Spec Ed Incl Rtl | 3 |

376 Tchng Meths Mild Intervs K12
Stud Teach: Mild Disabilities (1-12)

See Professional Education Assessment/Decision Points, p. 389, 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 stateapproved 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 Professional Education Handbook (bsu.edu/teachers/tehandbook) and the OTES-CP website(http://cms.bsu.edu/academics/collegesanddepartment s/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 credits 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 (through state approved agencies) prior to license recommendation.

## School Psychologist

This license will require a minimum of 70 graduate semester credits 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

Grade points will be checked at the end of each semester beginning when students earn 30 credits. An overall gradepoint average of at least 3.0 is required for admission to the teaching curriculum (at the end of DP2) and continuation in all educator preparation programs.

## Decision Point 1: <br> Identification with Professional Education

As a prerequisite to applying for admission to teacher education and to enroll in any professional education course after earning 30 credits, candidates must have:

- earned a minimum of 30 credits with an overall grade-point average of at least 2.75;
- completed an introductory professional education course with a $C$ or better grade;


## Decision Point 2:

## Admission to Teacher Education

For admission to a teaching curriculum and to register in any 300 -level and above professional education course, candidates must have:

- earned grades of $C$ or better in 100- and 200-level professional education courses and COMM 210 or equivalent;
- earned a minimum of 45 credits with an overall grade-point average of at least 3.0;
- passed the Core Academic Skills Assessment (CASA) at OEEL score levels; SAT, GRE, or ACT scores may substitute for CASA under some circumstances;
- satisfied content requirements specified by the student's licensure area. For specific requirements, students should see their Degree Works and Tk-20 profiles;
- met International Society for Technology Education Standards (ISTE) at the General Preparation level;
- maintained clearance from the Division of Student Affairs.


## Decision Point 3:

Admission to Student Teaching
To register for student-teaching courses, students must have:

- earned grades of $C$ or better in all 300- and 400-level professional education courses;
- earned a minimum of 93 credits with overall grade-point average of at least 3.0;
- be within 9 credits of completion of content courses;
- maintained a grade-point average of at least 2.5 in professional education courses and 2.5 in all content area courses;
- satisfied content requirements specified by the student's licensure area. For specific requirements, students should see their Degree Works and Tk-20 profiles;
- met ISTE standards at the Professional Preparation level;
- maintained clearance from the Division of Student Affairs;
- an approved application for student teaching.


## Decision Point 4:

## Recommendation for Graduation and Licensure

To be recommended for graduation and licensure, students must have:

- earned credit in student teaching;
- completed all requirements for graduation with an overall grade-point average of 3.0 ;
- maintained a grade-point average of at least 2.5 in professional education courses and 2.5 in all content area courses;
- met ISTE standards at the Student Teaching/Internship level;
- successfully completed service learning requirements;
- maintained clearance from the Division of Student Affairs;
- 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.


## 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.

## INITIAL INSTRUCTIONAL AND ADDITION, LICENSURE PROGRAMS

## License Grade Level Coverage

| Business Education | $5-12$ |
| :--- | :--- |
| Chemistry | $5-12$ |
| Early Childhood and Early Childhood Special Education-Dual Major | $\mathrm{P}-3$ |
| Early Childhood Education | $\mathrm{P}-3$ |
| Earth/Space Science | $5-12$ |
| Elementary Education | $\mathrm{K}-6$ |
| Engineering and Technology - CTE | $5-12$ |
| *English Learners Addition (English as a New Language) | $\mathrm{P}-12$ |
| English/Language Arts | $5-12$ |
| Exceptional Needs: Mild Interventions-Dual Major in Special Education and Elementary Education | $\mathrm{K}-6$ |
| Exceptional Needs: Early Childhood Special Education, Mild Interventions | $\mathrm{P}-6$ |
| Exceptional Needs: Hearing Impaired/Deaf | $\mathrm{K}-12$ |
| Exceptional Needs: Mild Interventions | $\mathrm{K}-12$ |
| Exceptional Needs: Intense Interventions | $\mathrm{K}-12$ |
| Family and Consumer Sciences - CTE | $5-12$ |
| *High Ability Education Addition | $\mathrm{P}-12$ |
| Journalism | $5-12$ |
| Life Science | $5-12$ |
| Mathematics | $5-12$ |
| Middle School Mathematics | $5-9$ |
| *Middle School Mathematics Addition (Elementary Education ONLY) | $5-9$ |
| Music Education: Instrumental and General | $\mathrm{P}-12$ |
| Music Education: Vocal and General | $\mathrm{P}-12$ |
| Physical Education and Health Dual Major | PE P-12, Health 5-12 |
| Physical Science | $5-12$ |
| Physics | $5-12$ |
| **Social Studies Education | $5-12$ |
| *Reading Addition | Same grade level as initial License |
| Theatre | $5-12$ |
| Visual Arts | $\mathrm{P}-12$ |
| ***World Language Education | $5-12$ |

*Addition, or Add-on license programs. Requires that the candidate complete an initial program in a standard license area, pass the appropriate exam(s), and achieve their initial license before the addition can be obtained.
**Social Studies - Initial instructional license includes at least two content areas. Additions can be either in single, or in multiple content areas. The content areas for both the initial license, and addition, include economics, geographical perspectives, government and citizenship, historical perspectives, psychology, and sociology.
*** World Language - Ball State offers several initial license programs in various world languages. They include Spanish, French, German, Japanese, Latin, and Chinese (Mandarin).

CTE - Career Technical Education

## 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 prestudent teaching educational field experiences in the oncampus Burris Laboratory School as well as in affiliated public school systems in Muncie and others within commuting distance. Seminars with a college supervisor are an integral part of the field experiences for these courses.

## STUDENT TEACHING

Student teaching in Indiana gives students 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 Clincial 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 this 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

## L. Boyland, 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.

## EDUCATION: ADMINISTRATION (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).

## EDUCATIONAL PSYCHOLOGY

J. Cassady, Chairperson
bsu.edu/edpsych
Educational psychology includes the study of human development, learning, motivation, measurement, research, and statistics. Courses deal with human relationships, human development, changes in human behavior, and the teaching-learning process.

## MINOR IN GIFTED AND TALENTED EDUCATION, 15 credits

| PREFIX | NO | SHORT TITLE |
| :--- | :--- | :--- |
|  |  |  |
| EDPS | 420 | Intro Gifted Talented |
|  | 421 | Identif and Evaluation Gifted |
|  | 425 | Models and Strategies Gifted |
|  | 496 | Practicum Gifted Education |
|  | 411 | Creative Thinking (3) |
| or |  |  |
|  | 423 | Social Emotional Needs Gifte |
|  |  |  |
| MINOR IN PSYCHOLOGY OF HUMAN |  |  |
| DEVELOPMENT, 18 credits |  |  |

PREFIX NO SHORT TITLE
CREDITS
12 credits from
EDPS 254 Early Childhood (3)
270 Lifespan Development (3)
350 Child Psychology (3)
351 Adolescent Psychology (3)
355 Adult Psychology (3)
360 Service Learning (3)
370 Immersive Learning (3)
12

6 credits from
ANTH 311 Ethnicity and Race (3)
BIO 214 Genetics (4)
453 Human Genetic Problem Humanity (3)
CPSY 230 Human Relation Development (3)
360 Aspects of Sexuality (3)
EDPS 250 Human Growth Development (3)
306 Behavior Analysis (3)

## DEVELOPMENT, 18 credits

EDPS 254

FCFC 202

HSC
365

EDPS 420 Intro Gifted Talented

SHORT TITLE
CREDITS
$\begin{array}{ll}\text { Identif and Evaluation Gifted } & 3 \\ \text { Models and Strategies Gifted } & 3 \\ \text { Creative Thinking (3) } & \\ \text { Social Emotional Needs Gifted (3) } & 3\end{array}$
12 crs

## EDUCATIONAL 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.

## 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.

Open only to students in secondary education programs.
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.

## 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.

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.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Topic titles will be announced before each semester.

A total of 6 credits may be earned.

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.

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.

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.

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.

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.

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 351 or 355 or permission of the instructor.

## 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 351 or 355 or permission of the instructor.

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 251, or permission of the
chairperson.
Not open to students who have credit in EDPS 393.
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 260 or permission of the instructor.

## 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.
411 Development of Creative Thinking (3) Examines theories and strategies for developing creative thinking among self and others. Analyzes factors that facilitate creativity, such as personality characteristics, process strategies, and environmental conditions.

## 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.

## 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.

## 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.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.
430 Mental Health (3) Study of the development of mental health. Covers the identification of mental health problems and examines methods of intervention and prevention.

Prerequisite: 6 credits of psychology.
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.

498 Seminar in Educational Psychology (3-6) 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.

499 Independent Study: Educational Psychology
(1-12) Individually planned experiences, extensive independent research in educational psychology.

Prerequisite: permission of the department chairperson.
A total of 12 credits may be earned.

## EDUCATIONAL STUDIES

## T. Kruczek, Chairperson

## bsu.edu/edstudies

The Department of Educational Studies offers professional education preparation in secondary, junior high/middle school, and allgrade teacher education. There are also minors in educational technology, leadership studies, and multicultural education (nonteaching 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

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Professional education sequence |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 150 | Basic Concepts of Secondary Ed | 3 |
|  | 380 | Princ of Tchng in Sec School | 3 |
| From teaching methods courses | $5-6$ |  |  |
| Student teaching | 12 |  |  |

Departmental equivalents may substitute for EDJH 385; EDSE 150, 380.
All-grade teaching majors available in the following areas:
Health and physical education
Music education
Visual arts
See the Department of Special Education for the programs in special education and hearing impaired/deaf.

## SENIOR HIGH, JUNIOR HIGH, AND MIDDLE SCHOOL EDUCATION PROGRAMS

## PREFIX NO SHORT TITLE

CREDITS
Professional education sequence

| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| :--- | :---: | :--- | :---: |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDSE | 150 | Basic Concepts of Secondary Ed | 3 |
|  | 380 | Princ of Tchng in Sec School | 3 |
| From teaching methods courses | $3-8$ |  |  |
| Student teaching |  |  | 12 |

Departmental equivalents may substitute for EDJH 385;
EDSE 150, 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)
Technology and engineering education
Theatre

## TEACHING MAJORS IN SCIENCE

See the College of Sciences and Humanities, p. 259.

## TEACHING MAJOR IN SOCIAL STUDIES, 99 credits

See the College of Sciences and Humanities, p. 259.
MINOR IN EDUCATIONAL TECHNOLOGY, 15 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :---: | :---: | :--- | :---: |
| EDTE | 355 | Lrn and Tchng w Emerging Tech | 3 |

12 credits from
EDTE 120 Intro Comp and Dig Media Tchrs (1)
350 Curr Integration of Tech (3)
352 Multi Web Design and Dev Ed (3)
360 Studies in Ed Tech (3)
365 Visual and Digital Literacies (3)
470 Technology Policy and Ethics (3)
480 Internship in Educational Tech (2-4)
485 Schl Info Infra and Tech (3)
MATH 331 Technology Teach Assess Math (3)
SPCE 331 Tech in Special Education (1-3) 12
15 crs
Any content-area course that significantly addresses technology integration may be used for electives.

MINOR IN LEADERSHIP STUDIES, 18 credits
PREFIX NO SHORT TITLE
CREDITS
Core courses
EDHI 302 Student Ldrs in Comm Serv (1-3)
402 Globl Ldrshp: Sr Cap Exp (1-3)
Core electives, 3-6 credits from
EDHI 102 Intro to Students as Ldrs (1)
200 Intro Pers Srves Res Halls (1-3)
202 Students as Group Leaders (1)
401 Special Topics in Leadership (1-3)

400 Top Sem in Multicul Stds (3)
MGT 271 Intro Organizational Behavior (3)
MIL 101 Intro to Military Science (1)
102 Introduction to Leadership (1)
PHIL 102 Intro to Critical Reasoning (3)
202 Ethics (3)
POLS 130 American National Government (3)
411 American Political Thought (3)
474 Women and Politics (3)
SOC 242 Social Problems (3)
320 Social Inequality (3)
441 Social Change (3)
18 crs
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

## PREFIX NO SHORT TITLE

CREDITS
EDMU 205 Intro to Multicul Ed
Adv Ethnic Multicul Grp Beh
Instruct Strat Multicul Schls

EDMU 302 Self and Social Const of ID (3)
370 Rep and Multicul Thry and Prac (3)

15 crs
Other electives may be used with approval.

## LICENSE IN COMPUTER EDUCATION TEACHING (UNDERGRADUATE, NON-STAND-ALONE LICENSE), 15 credits

PREFIX NO SHORT TITLE
CREDITS
EDTE 350 Curr Integration of Tech 3
470 Technology Policy and Ethics
6 credits from
EDTE 352 Multi Web Design and Dev Ed (3)
355 Lrn and Tchng w Emerging Tech (3)
360 Studies in Ed Tech (3)
365 Visual and Digital Literacies (3)
Any content-area course that significantly addresses technology integration may be used for electives.

3 credits from
EDTE 480 Internship in Educational Tech (2-4)
485 Schl Info Infra and Tech (3)
15 crs

## EDUCATION: ADULT AND 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 participators.

Prerequisite: permission of the department chairperson.
299X Experimental/Developmental Topics (0-6) Topics relevant to the discipline. Course titles to be announced before each semester.

A total of 6 credits may be earned.

## EDUCATION: ALL-GRADE (EDAL)

470 Student Teaching: All-Grade (6-7) 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.
EDUCATION: CURRICULUM (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.

## EDUCATION: FOUNDATIONS (EDFO)

420 Social, Historical, and Philosophical Foundations of Education (3) An academic study of the complex relationships between schools and society through the disciplines of sociology, history, and philosophy of education. The goal is to develop disciplines of normative, interpretive, and critical perspectives on education.

Open only to juniors.

## 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.

200 Introduction to Personnel Services in Residence Halls (1-3) Principles involved in self-awareness, developing interand 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.
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.

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.

## 302 Student Leaders in Community Service (1-3)

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.

401 Special Topics in Leadership (1-3) Critical examination of selected 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.

402 Global Leadership: Senior Capstone Experience (1-3) 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.

## EDUCATION: JUNIOR HIGH/ MIDDLE SCHOOL (EDJH)

## 299 Independent Study in Junior High/Middle School

 Education (1-3) 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.

## 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.

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 251 or 351.

## 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.
## 460 Student Teaching in the Junior High/Middle School

 (6-7) 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.

## 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.

## EDUCATION: MULTICULTURAL (EDMU)

200 Cross-Role Experiences in Secondary Schools (3)
Through biographical study, a reflection on the life circumstances of representatives from a variety of cultures in the United States, paying specific attention to the contribution education made to their state of affairs. Introduces humanity's struggle for human rights and the role of human rights education in encouraging social change.

205 Introduction to Multicultural Education (3) Examines social factors that affect teacher decision making and student achievement in United States schools. Addresses the need for intercultural competence, culturally informed instructional strategies, promotion of social justice, and reduction of racism and sexism in order to create democratic classrooms.

Prerequisite: sophomore standing.
206 Advanced Study of Ethnic and Multicultural Group
Behavior (3) Focuses on critical analyses of the concepts introduced in EDMU 205. By studying specific cultural groups in relation to schooling, develops an in-depth understanding of the impact culture has on the process of
teaching and learning. Addresses the needs for intercultural competence, culturally sensitive instruction, and prejudice reduction.

Prerequisite: EDMU 205.

## 301 Instructional Strategies in Multicultured Schools (3)

Starts from an understanding that how people are taught is the greatest variable in determining student achievement.
Explores the theory and application of alternative teaching models that seek to not only increase cultural awareness, but also to address the achievement gap between individuals from different cultural groups.

Prerequisite: EDMU 205.
302 Self and the Social Construction of Identity (3) This course examines the concept of identity from an interdisciplinary perspective. Students will develop a coherent theoretical understanding of how, and to what extent, identities are socially constructed, how they change, and the meanings that are ascribed to them.

## 370 Representation and Multiculturalism: Theory and

 Practice (3) Examines the relationship among race, class, gender, sexual identity, and representations through a variety of media and historical contexts. It also explores the role of technology and its potential to empower cultural groups and counter negative stereotypes.400 Topical Seminar in Multicultural Studies: Culture of Masculinities (3) Each seminar focuses on a different topic in multicultural issues based on the faculty member's field of expertise.

## 470 Understanding Cultural Diversity in American

Education (3) Designed to prepare prospective teachers to analyze lifestyles of different cultural groups. Emphasizing children's strengths within their cultural contexts will be an important focus.

Prerequisite: EDMU 205 or permission of the program director.

## EDUCATION: SECONDARY (EDSE)

150 Basic Concepts of Secondary Education (3) Designed to help students make valid decisions about preparing for and functioning in teaching careers. Professionalism, job requirements, employment opportunities, secondary school curricula, and the role of secondary education within the entire educational process are discussed.

## 210 Field Experience in Secondary Education (1-3)

Provides direct experiences working with students, teachers, educational organizations, community agencies, and other appropriate assignments for undergraduates who plan to enter secondary school teaching.

A total of 3 credits may be earned.

299X Experimental/Developmental Topics (0-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.
320 Reading for Diverse Learners in Secondary Content Classes (3) Prepares secondary pre-service teachers to meet the developmental literacy/learning needs of the diverse student population that they will encounter in their content area classes. Offered on-line only.

Prerequisite: successful completion of an introductory course in the content major and completion of decision point 2 and admission to Teacher Education.

380 Principles of Teaching in the Secondary School (3) Combines theory and practice of teaching at the secondary level. Includes the study of instructional strategies, evaluation, curriculum development and organization, learning styles, technology, legal issues, and classroom management. Intensive in-school assignments, observations, participation, and direct contact with adolescents required.

Prerequisite: permission of the department chairperson.
Parallel: EDJH 385.
399 Independent Study in Secondary Education (1-3) Independent study and research in secondary education. Topics and activities to be chosen in consultation with an instructor with competence in the subject involved.

Prerequisite: permission of the department chairperson.
A total of 3 credits may be earned.

## 434 Classroom Management: Improving Student

 Behavior in Secondary Schools (3) Designed to prepare prospective secondary teachers to cope with discipline problems in all secondary school settings. Emphasizes skills and procedures for preventing or remedying disruptive behavior by secondary students and ways to create a positive environment for learning.460 Student Teaching: Secondary School (6-7) Required for the standard license in secondary education. Involves a full-day assignment for 10 weeks in an approved secondary school. Offered credit/no credit only.

Prerequisite: admission to student teaching.
A total of 7 credits may be earned.
465 Elective Student Teaching: Secondary, Junior High/Middle, or All-Grade ( $\mathbf{3}$ or 5) Involves a full-day assignment for either three or six weeks in an approved school setting. Offered credit/no credit only.

Parallel: EDSE 460 or EDAL 470.
A total of 5 credits may be earned.
470 Issues in Secondary Education (3) Innovative practices will be identified, defined, and analyzed regarding their effect on secondary schools. Creative, innovative instructional
approaches will be used. Field trips or visitations to innovative secondary schools will be arranged when practical, and students will concentrate on innovative practices.

## 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.

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.

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. Preservice teachers develop standards-based lessons where various technologies support critical thinking and learning of their students.

## 352 Multimedia Web Design and Development for

Education (3) Emphasizes design and development of Webbased multimedia modules into K-12 curricula. Interactive Web sites are developed.

355 Learning and Teaching with Emerging Technologies (3) Content examines the affordances and constraints to learning and 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.

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.

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.

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.
480 Internship in Educational Technology (2-4)
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.
485 School Information Infrastructures and Technology Leadership (3) Explores emergent models and information systems for online learning, assessment, learning management, and content management in $\mathrm{K}-12$ 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.

## ELEMENTARY EDUCATION

## P. Clark, Chairperson <br> 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. 18), 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.

## MAJOR IN EARLY CHILDHOOD WITH MINOR IN EARLY CHILDHOOD SPECIAL EDUCATION (PRE-K ONLY TRACK-NO LICENSE) CONCENTRATION (BA/BS), 90 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :--- |
| EDEL | 100 | Educ in a Democratic Society | 3 |
|  | 200 | Plan for Elem and EC Classroom | 3 |
|  | 231 | Family and Community Relations | 3 |
|  | 244 | Early and Elem Educ Soc Just | 3 |
|  | 252 | Creative Exp for Yng Children | 3 |
|  | 260 | EC Curriculum and Instruction | 3 |
|  | 301 | Tchg in the Pre-K K Program | 3 |
|  | 330 | Health and Well Being in EC | 3 |
|  | 340 | Cult and Lang in Tchg Lrng | 3 |
|  | 381 | Early Childhood Language Arts | 3 |
|  | 442 | Administration of EC Programs | 3 |
|  | 491 | Independent Study in Elem Ed (1-6) | 3 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDPS | 260 | Development Elementary | 3 |
|  | 391 | Assessment Early Childhood | 3 |
| EDRD | 204 | Literature for Children (3) |  |
|  | or |  |  |


|  | 318 | Lit for Young Children (3) | 3 |
| :---: | :---: | :---: | :---: |
|  | 390 | Early Emergent Literacy | 3 |
| FCFC | 310 | Promot Prosocial Behav Child | 3 |
|  | 315 | Infant Toddler Curr Envir | 3 |
| MUSE | 265 | Music Basics for the Classroom | 3 |
| SPCE | 201 | Intro Stdnts with Except Nds | 3 |
|  | 210 | Thry and Pract in EC Spec Ed | 3 |
|  | 215 | Assess Yng Chldrn Exc Nds | 3 |
|  | 311 | Dev Meth Infs and Todds Exc | 3 |
|  | 312 | Dev Meth PS Chldrn with Exc | 3 |
|  | 417 | Pract: Inf Tods PS Spec Nds (1-6) | 3 |
| Advisor approved elective |  |  | 12 |

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).

## TEACHING MAJOR IN EARLY CHILDHOOD EDUCATION (Birth-Grade 3) (BA/BS), 102 credits

| AHS | 100 | Introduction to Art | 3 |
| :--- | :--- | :--- | :--- |
| BIO | 102 | Biol Concepts for Teachers | 3 |
| EDEL | 100 | Educ in a Democratic Society | 3 |
|  | 200 | Plan for Elem and EC Classroom | 3 |
|  | 244 | Early and Elem Educ Soc Just | 3 |
|  | 351 | Teaching in the K Primary Prog | 3 |
|  | 400 | Student Teaching: Pre-K | 6 |
|  | 401 | Student Teaching: Kindergarten (6) |  |
|  | or |  | 6 |
|  | 402 | Student Teaching: Primary (6) | 6 |
|  | 442 | Administration of EC Programs | 3 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDPS | 260 | Development Elementary | 3 |
|  | 393 | Educational Psych Elementary | 3 |
| EDRD | 204 | Literature for Children (3) |  |
|  | or |  | 3 |
|  | 318 | Lit for Young Children (3) | 3 |
|  | 390 | Early Emergent Literacy | 3 |
|  | 430 | Assess Interven Read Lang Arts | 3 |
| FCFC | 265 | Infant and Toddler Dvlp Educ |  |
| GEOG | 101 | Earth Sea Sky: Geographic View (3) |  |
|  | or |  | 3 |
| GEOL | 101 | Planet Earth Geol Environment (3) | 3 |
| HIST | 201 | American History, 1492-1876 | 3 |
| HSC | 350 | Elem Schl Hlth Prgrms | 3 |
| MATH | 201 | Num Oper Alg Reas Elem Teach | 4 |
|  | 202 | Data Geo Meas Elem Teach | 3 |
|  | 391 | Teach Mathematics Elementary | 3 |
| MUSE | 265 | Music Basics for the Classroom | 3 |
| PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3 |
| SCI | 398 | Teach Sci in Early Pri Grds | 3 |
| SPCE | 302 | Tch Studs and Dis in Gen Ed | 3 |
| SS | 398 | Teaching SS EC Kind-Grade 3 | 3 |
| Eli |  |  |  |

Elective


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.

## TEACHING MAJOR IN ELEMENTARY EDUCATION

## (Grades K-6) (BA/BS), 102 credits

| PREFIX | NO | SHORT TITLE CR | CREDITS |
| :---: | :---: | :---: | :---: |
| AHS | 100 | Introduction to Art | 3 |
| BIO | 102 | Biol Concepts for Teachers | 3 |
| EDEL | 100 | Educ in a Democratic Society | 3 |
|  | 200 | Plan for Elem and EC Classroom | 3 |
|  | 244 | Early and Elem Educ Soc Just | 3 |
|  | 300 | Mgt, Org, and Instr Elem Clsrm | 3 |
|  | 350 | Tchg in the Elem Ed Classroom | 3 |
|  | 463 | Student Teaching: Elementary | 6 |
|  | 465 | Student Teaching: Elementary | 6 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDPS | 260 | Development Elementary | 3 |
|  | 393 | Educational Psych Elementary | 3 |
| EDRD | 204 | Literature for Children | 3 |
|  | 300 | RDG and LA Instruction | 3 |
|  | 350 | Adv RDG and LA | 3 |
|  | 430 | Assess Interven Read Lang Arts | 3 |
| GEOG | 101 | Earth Sea Sky: Geographic View (3) |  |
|  | or |  |  |
| GEOL | 101 | Planet Earth Geol Environment (3) | 3 |
| HIST | 201 | American History, 1492-1876 | 3 |
| HSC | 350 | Elem Schl Hlth Prgrms | 3 |
| MATH | 201 | Num Oper Alg Reas Elem Teach | 4 |
|  | 202 | Data Geo Meas Elem Teach | 3 |
|  | 391 | Teach Mathematics Elementary | 3 |
| MUSE | 265 | Music Basics for the Classroom | 3 |
| PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | -3) 3 |
| SCI | 397 | Teach Sci in the Elem Schl | 3 |
| SPCE | 302 | Tch Studs and Dis in Gen Ed | 3 |
| SS | 397 | Teaching SS in the Elemen Schl | 3 |
| Elective |  |  | 2 |
|  |  |  | 90 crs |
| Concentration area |  |  | 12 crs |

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 New 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.

ENG 334 Eng Linguistics for Educators 3
436 Theory and Research in TESOL 3
437 Methods and Materials in TESOL 3
457 Practicum in TESOL

The above requirements are for the English as a New Language concentration area available for Teaching Majors in Elementary Education (Grades K-6) only.

| Gifted and Talented, 12 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| EDPS | 420 | Intro Gifted Talented | 3 |
|  | 421 | Identif and Evaluation Gifted | 3 |
|  | 425 | Models and Strategies Gifted | 3 |
|  | 411 | Creative Thinking (3) |  |
|  | $\begin{aligned} & \text { or } \\ & 423 \end{aligned}$ |  |  |
|  |  | Social Emotional Needs Gifted (3) | 3 |
|  |  |  | 12 crs |
| Kindergarten/Primary Education, 12 credits |  |  |  |
| EDEL | 231 | Family and Community Relations | 3 |
|  | 252 | Creative Exp for Yng Children | 3 |
|  | 440 | Kindergarten Education | 3 |
| EDRD | 390 | Early Emergent Literacy | 3 |
|  |  |  | 12 crs |
| 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. |  |  |  |
| Required course |  |  |  |
| EDEL | 302 | Dev Elem Eng La Multicult Lit | 3 |
| Choose one of the following writing courses |  |  |  |
| ENG | 213 | Intro to Digital Literacies (3) |  |
|  |  | Intro to Creative Writing (3) | 3 |
| Choose one of the following literature courses |  |  |  |
| EDRD | 318 | Lit for Young Children (3) |  |
| ENG | 205 | World Literature (3) |  |
|  | 206 | Reading Literature (3) |  |
|  | 414 | Young Adult Literature (3) | 3 |
| Choose one of the following language courses |  |  |  |
| ENG | 220 | Language and Society (3) |  |
|  |  | Intro to Linguistics Science (3) |  |
|  |  | English Linguistics (3) | 3 |
|  |  |  | 12 crs |
| Mathematics, 12 credits |  |  |  |
| Designed to provide a mathematics background in the content standards characterizing the K-12 mathematics curriculum. |  |  |  |
| Required courses |  |  |  |
| MATH | 310 | Algebra Elem Mid Scl Teach | 3 |

316 Num Thry Elem Mid Scl Teach
360 Geometry Elem Mid Scl Teach 3



| Modern Languages: Japanese concentration |  |  |  |
| :---: | :---: | :---: | :---: |
| JAPA | 202 | Intermediate Japanese 2 | 4 |
|  |  | Advanced Japanese 1 | 4 |
|  | 302 | Advanced Japanese 2 | 4 |
|  |  |  | 12 crs |
| Modern Languages: Spanish concentration |  |  |  |
| SP | 202 | Intermediate Spanish 2 | 3 |
|  | 301 | Conversation and Composition | 3 |
|  | 302 | Composition and Grammar | 3 |
| 3 credits from any other 300-400-level SP course |  |  | 3 |

Classical Languages, 12 credits
Classical Languages: Latin concentration
LAT 202 Intermediate Latin 2 3

301 Introduction to Prose 13


Choose a minimum of 12 credits from the following courses:

## State/World Connections, 12 credits

Includes a broad range of courses from the social sciences chosen to help prepare teachers for educating students in a world of ever-expanding worldwide connections. Students selecting this concentration will learn how to use this content in their own teaching of students in elementary grades.

Required course

9 credits from three different subjects
ANTH 101 Intro to Cultural Anthropology (3)
Archaeology and Culture (3)
111 Anth, Cult, and Globalization (3)
342 Anth of the United States (3)

279 Problems of Emerging Nations (3)
310 Amer Econ Hist 2: 1860-1990 (3)
350 Geog United States and Canada (3)
351 Latin American and Caribbean (3)
353 Geography of Indiana (3)

201 American History, 1492-1876 (3)
202 US History, 1877 to Present (3)
415 History of Indiana (3)
Choose 3 credits from the following courses
EDRD 320 Disciplinary Literacy Elem Sch (3)

12 crs

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 requirement, then GEOL 201 must be selected for the concentration.

## 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

| EDTE | 350 | Curr Integration of Tech | 3 |
| :--- | :--- | :--- | :--- |
|  | 470 | Technology Policy and Ethics | 3 |
| TDPT | 100 | Technology and Society | 3 |

Choose 3 credits from the following courses

| CS | 110 | Intro Comp Sci and Web Prog (3) |
| :--- | :--- | :--- |
| EDCU | 331 | Public School Curriculum (3) |
| EDRD | 445 | Computers in Rdg Instruction (3) |
| EDTE | 352 | Multi Web Design and Dev Ed (3) |
|  | 355 | Lrn and Tchng w Emerging Tech (3) |
|  | 360 | Studies in Ed Tech (3) |
|  | 365 | Visual and Digital Literacies (3) |
|  | 480 | Internship in Educational Tech (2-4) |
| TDPT | 400 | Capstone in Technology (3) |

12 crs

## 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

FCFC 250 Family Relations 3
NUTR 240 Nutrition for Educators 3
Choose 6 credits from the following courses

| FCFC | 202 | Child and Family Wellness (3) |
| :--- | :--- | :--- | :--- |
|  | 380 | Parenting (3) |
| FCFN | 110 | Prin Food Prep and Food Serv (3) |
|  | 395 | Food and Culture (3) |

12 crs
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.

| HSC | 363 | Current Issue Admin Coord H PE | 3 |
| :--- | :---: | :--- | :---: |
| PEP | 227 | Intro Adapted Physical Ed Act | 3 |
|  | 291 | Motor Development and Learn | 3 |
|  | 394 | Teaching Phys Educ in Elem Sch | 3 |
|  |  | 12 crs |  |

## See Teachers College Interdepartmental for Dual Major in Elementary and Special Education.

## EDUCATION: 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.
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 JOUR 150 or SCI 150 or MATH 150 or MUSE 100 or FL 150 or SS 150.

231 Family and Community Relations (3) Explores important and complex roles of families in the educational development of young children. Factors affecting familychild, family-community, and child-community interactions and skills are studied and related to the educational process.

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 with minimum grade of $C$.

## 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.

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.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.

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.
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: EDEL 381.
Open only to early childhood education and dual early childhood/early childhood special education majors.

Students are not permitted to register simultaneously in EDEL 301 and 351.

May be repeated only once.

## 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.
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.
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.
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.

340 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.

## 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.
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 the 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 EDEL 301 and 351.

May be repeated only once.
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: EDEL 301.
Open only to early childhood education and dual early childhood/early childhood special education majors.

400 Student Teaching: Pre-Kindergarten (6) Capstone clinical experience in the practice and application of teaching skills with pre-kindergarten children. Students enroll in EDEL 400 (6) the same semester as EDEL 401 (6) or EDEL 402 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; $C$ or better grades in EDEL 301 and 351 and EDRD 400 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 401 or 402.
401 Student Teaching: Kindergarten (6) Capstone clinical experience in the practice and application of teaching skills with kindergarten children. Students enroll in EDEL 400 (6) the same semester as EDEL 401 (6) or EDEL 402 (6).
Offered credit/no credit only.
Prerequisite: completion of decision point 3: admission to student teaching; $C$ or better grades in EDEL 301 and 351
and EDRD 400 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 400.
402 Student Teaching: Primary Grades (6) Capstone clinical experience in the practice and application of teaching skills with primary grade (1-3) children. Students enroll in either EDEL 401 (6) or EDEL 402 (6) the same semester as EDEL 400 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; C or better grades in EDEL 301 and 351 and EDRD 400 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 400.
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.
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.

## 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.
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 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.
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 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.
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 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; $C$ or better grades in EDEL 300 and 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.
490 Practicum in Elementary Education (1-3) 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.
491 Independent Study in Elementary Education (1-6) Independent study and research in elementary education. Prerequisite: permission of the department chairperson. A total of 6 credits may be earned.

492 Issues in Elementary Education (1-2) 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.

## 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 . May be repeated only once. 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 JOUR 150 or SCI 150 or MATH 150 or MUSE 100 or FL 150 or SS 150.

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.
318 Literature for Young Children (3) An introduction to literature for young children from pre-K to third grade. May be repeated only once.

## 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 JOUR 150 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.
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.
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 JOUR 150 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.
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.
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.

## 430 Assessment and Intervention in Elementary Schools

(3) Provides prospective teachers with 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: $C$ or better grade in EDRD 350; completion of decision point 2: admission to the teacher education program.

May be repeated only once.
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 350 for computer license add-on students; EDRD 400 or its equivalent for others; admission to the teacher education program.

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.
490 Strategies in the Teaching of Reading (3) Provides preservice 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.
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.

# FAMILY, CONSUMER, AND TECHNOLOGY EDUCATION 

## S. Hall, Chairperson <br> bsu.edulfcte

We are a diverse group of faculty who are dedicated to preparing competent and committed educators, leaders, and human services providers in a variety of settings. The department was created in 2017 by combining programs from the Department of Family and Consumer Science and Department of Technology into the Teachers College. The realignment will help students flourish by providing them the resources and support to more efficiently pursue academic excellence.

Students can select one of several programs or concentrations:

- The Family and Child Major. This concentration comprises of three areas, each of which facilitates careers working with families and children. The program incorporates the Child Study Center, which is accredited by the National Academy of Early Childhood Programs. Students may choose one or more of these concentrations in which to specialize within the program:
- Family and Child: Child Development. Child Development prepares students for careers working with young children and their families. Students attain the skills to teach or direct child development programs, work as developmental therapists, home visitors, or in other areas of the early care and education field. They have many experiential opportunities to interact with young children at the nationally accredited Child Study Center.
- Family and Child: Child Life. Child Life assists students in preparing to pursue a Master's degree in child life. Beginning in 2022, new child life specialists will be required to have completed a Master's degree (currently not offered at BSU). Child life specialists work in health care settings, primarily hospitals, and assist pediatric patients and their families. Students learn to apply child development and family practices to meet the needs of their target audience. Course work aligns with the curricular emphases of the Child Life Council, the certifying organization for the profession.
- Family and Child: Family Studies. Family Studies prepares students for careers in working with individuals and families across the life cycle. This concentration provides the opportunity for graduates to become Certified Family Life Educators (CFLE), a national certification regulated by National Council on Family Relations. Family Life Education incorporates a preventive and educational approach to individual and family issues such as communication and relationship skills, parenting education, marriage education, and diversity and other social issues related to the family. Family Studies also provides ideal preparation for students interested in pursuing advanced degrees in marriage and family counseling.
- Family and Consumer Sciences Education. This program prepares individuals to teach family and consumer sciences classes in public or private schools. The focus of these classes in schools today is on family roles, child development, life skills, consumer rights and responsibilities, and community contributions. Graduates who complete this major also qualify to become extension educators or work for other public and private agencies. This program is approved by CAEP (Council for the Accreditation of Educator Preparation).
- Teaching Major in Technology and Engineering Education. The Teaching Major in Technology and Engineering Education curriculum prepares students to teach pre-engineering and technology courses at the secondary level (grades 6-12).


## MAJOR IN FAMILY AND CHILD (BA/BS), 64-69 credits

PREFIX NO SHORT TITLE
Complete the following, 43 credits
EDPS 351 Adolescent Psychology 3
FCFC 100 Intro Family Child 1
202 Child and Family Wellness

CREDITS

3
1
3

| Family Relations | 3 |
| :--- | :--- |
| Infant and Toddler Dvlp Educ | 3 |
| Child Development | 3 |
| Parenting | 3 |
| Present Practice Tech Fam Educ | 3 |
| Grant Writing Research Methods | 3 |
| Family Stressors and Crises | 3 |
| Family Policy | 3 |
| FCS Body of Knowledge | 3 |

Infant and Toddler Dvlp Educ 3
Child Development 3

Family Stressors and Crises

FCS

|  | 403 | FCS in Practice | 3 |
| :---: | :---: | :---: | :---: |
| NUTR | 240 | Nutrition for Educators (3) |  |
|  | or |  |  |
|  | 275 | Personal Nutrition (3) | 3 |
| PSYS | 100 | Intro to Psychological Science | 3 |
| Choose one area to complete the major: |  |  |  |
| Family and Child: Child development concentration, 21 credits |  |  |  |
| EDEL | 260 | EC Curriculum and Instruction | 3 |
|  | 442 | Administration of EC Programs | 3 |
| FCCD | 400 | Internship Child Dev (3-6) | 3 |
| FCFC | 310 | Promot Prosocial Behav Child | 3 |
|  | 320 | Leadership Mgt Child Dev Prog | 3 |
|  | 465 | Adv Child Dev in Practice | 3 |
| SPCE | 210 | Thry and Pract in EC Spec Ed | 3 |
|  |  |  | 21 crs |
| Family and Child: Child life concentration, 26 credits |  |  |  |
| BIO | 100 | Biology for a Modern Society | 3 |
|  | 254 | Biology in the Social Context | 3 |
| FCCL | 400 | Internship in Child Life (3-6) | 3 |
| FCFC | 310 | Promot Prosocial Behav Child | 3 |
|  | 465 | Adv Child Dev in Practice | 3 |
|  | 492 | Prof Practice Child Life | 3 |
| HSC | 371 | Death and Dying | 3 |
| NUR | 101 | Termin Hlth Care Prof and Cons | 2 |
|  | 103 | Health Behav: Cult Variations | 3 |
|  |  |  | 26 crs |
| Family and Child: Family studies concentration, 24 credits |  |  |  |
| EDPS | 355 | Adult Psychology (3) |  |
|  | or |  |  |
| SOC | 431 | Aging and the Life Course (3) | 3 |
| FCFC | 340 | Life Workplace Management | 3 |
|  | 394 | Family Services Administration (3) |  |
|  | or |  |  |
|  | 320 | Leadership Mgt Child Dev Prog (3) |  |
|  | or |  |  |
|  | 492 | Prof Practice Child Life (3) | 3 |
|  | 475 | Marriage | 3 |
| FCFS | 400 | Internship in Family Studies (3-6) | 3 |
| HSC | 261 | Health, Sex, and Family Life (3) |  |
|  | or |  |  |
| PSYS | 377 | Psychology of Sexual Behavior (3) | 3 |
| SOCW | 100 | Introduction to Social Work | 3 |
|  | 325 | Human Behav and Social Envr 2 | 3 |
|  |  |  | 24 crs |

## MINOR IN DESIGN TECHNOLOGY, 18 credits

PREFIX NO SHORT TITLE CREDITS

| TCST | 106 | CAD for Construction Management | 3 |
| :--- | :--- | :--- | :--- |
| TDPT | 280 | 3D Prototyping | 3 |
| TGRA | 286 | Digital Photography 1 | 3 |
|  | 387 | Digital Photography 2 | 3 |
| TMFG | 105 | Technical Design Graphics | 3 |
|  |  | 3 |  |
| 3 |  |  |  |

MINOR IN FAMILY AND CONSUMER SCIENCES,
$\mathbf{2 1}$ credits

PREFIX NO |  | SHORT TITLE | CREDITS |
| :--- | :--- | :---: |
|  |  |  |
| FCFN | 110 | Prin Food Prep and Food Serv |
| FCS | 103 | FCS Body of Knowledge |

6 credits from
FCFA 101 Dimensions of Clothing (3)
270 The Fashion Industry (3)
FCPM 104 Housing Decisions (3)
3 credits from
NUTR 240
Nutrition for Educators (3)
Personal Nutrition (3)
Prin of Human Nutrition (3)

6 credits from
FCFC 202
Child and Family Wellness (3)
250 Family Relations (3)
265 Infant and Toddler Dvlp Educ (3)
275 Child Development (3)
340 Life Workplace Management (3)
450 Consumer Education (3)
475 Marriage (3)
21 crs

## MINOR IN INDUSTRIAL LEADERSHIP, 18 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| MGT | 300 | Managing Behavior in Org | 3 |
|  | 361 | FDN of HR Employee Relations | 3 |
| TDPT | 360 | Industrial Safety and Health | 3 |
|  | 390 | Training and Devel in Industry | 3 |
| TMFG | 161 | Intro Manufacturing Industries | 3 |
| Approved technical elective | 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 and Teachers College for the descriptions of these courses and other professional requirements of the teacher education program.

## TEACHING MAJOR IN FAMILY AND CONSUMER SCIENCES (BA/BS), 87 credits

| PREFIX | NO | SHORT TITLE | CREDIT |
| :--- | :--- | :--- | ---: |
|  |  |  |  |
| FCED | 150 | Basic Concept Second Ed in FCS | 3 |
|  | 492 | Implementation FCED Programs | 3 |
|  | 493 | Cooperative Programs in FCED | 3 |
| FCFA | 101 | Dimensions of Clothing | 3 |
|  | 102 | Fund of Apparel Construction | 3 |
|  | 230 | Textiles for Apparel | 3 |
| FCFC | 202 | Child and Family Wellness | 3 |
|  | 250 | Family Relations | 3 |
|  | 275 | Child Development | 3 |
|  | 340 | Life Workplace Management | 3 |
| FCFN | 110 | Prin Food Prep and Food Serv | 3 |
|  | 220 | Meal Design and Presentation | 3 |
| FCPM | 104 | Housing Decisions | 3 |
|  | 123 | Interior Design Basics | 3 |
|  | 350 | Residential Equip, Energy Tech | 3 |
| FCS | 103 | FCS Body of Knowledge | 3 |
|  | 403 | FCS in Practice | 3 |
| NUTR | 275 | Personal Nutrition (3) |  |
|  | or |  |  |
|  | 340 | Prin of Human Nutrition (3) | 3 |

54 crs
CHEM 100 has a prerequisite for FCFA 230 and FCFN 340 is waived.

## SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Professional education sequence, 33 credits |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDRD | 320 | Disciplinary Literacy Elem Sch | 3 |
| EDSE | 380 | Princ of Tchng in Sec School | 3 |
| Student teaching | $\underline{12}$ |  |  |
|  |  | 33 crs |  |

See Professional Education Assessment/Decision Points, p. 389, for additional information.

## TEACHING MAJOR IN TECHNOLOGY AND ENGINEERING EDUCATION (BA/BS), 81 credits

The Teaching Major in Technology and Engineering Education curriculum prepares students to teach preengineering and technology courses at the secondary level (grades 6-12).

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| MATH | 111 | Pre-Calculus Algebra | 3 |
| PHYC | 100 | Conceptual Physics | 3 |
| TCST | 250 | Construction Methods Matls 1 | 3 |
| TDPT | 100 | Technology and Society | 3 |
|  | 204 | Energy Processing | 3 |
|  | 406 | Technical Decision Making | 3 |
| TEDU | 102 | Design Techniques | 3 |
|  | 305 | Technological Systems | 3 |
|  | 403 | Technological Enterprise | 3 |

3 credits related to engineering competency
TCST 106 CAD for Const Management (3)
TDPT 210 Engineering Principles (3)
TMFG 105 Technical Design Graphics (3) 3
3 credits related to information processing
CS 110 Intro Comp Sci and Web Prog (3)
TCMP 111 Computer Assembly Trblshooting (3)
TGRA 180 Introduction to Graphic Comm (3) 3
3 credits related to materials/resources
$\begin{array}{lll}\text { TDPT } & 203 & \text { Material Processing (3) } \\ & 280 & \text { 3D Prototyping (3) } \\ & 303 & \text { Manufacturing Systems (3) } \\ \text { TEDU } & 108 & \text { Production Techniques (3) } \\ \text { TMFG } & 262 & \text { Manufacturing Materials (3) }\end{array}$
Directed elective

CHEM 111 is prerequisite to TMFG 262. Students should take PHYC 100 for the University Core Curriculum and to satisfy the prerequisite for TDPT 210. Either CHEM 111 or PHYC 100 may satisfy the University Core Curriculum Tier 1 Domain-Natural Sciences.

## SENIOR HIGH, JUNIOR HIGH/ MIDDLE SCHOOL EDUCATION PROGRAM

PREFIX NO SHORT TITLE

Professional education sequence, 42 credits EDFO 420 Soc, Hist, Phil Found of Ed

CREDITS 3

| EDJH | 385 | Prin of Tchng in Mid Schl | 3 |
| :--- | :---: | :--- | :---: |
| EDMU | 205 | Intro to Multicul Ed | 3 |
| EDPS | 251 | Development Secondary | 3 |
|  | 390 | Educational Psychology | 3 |
| EDRD | 320 | Disciplinary Literacy Elem Sch | 3 |
| EDSE | 380 | Princ of Tchng in Sec School | 3 |
|  | 460 | Student Tchng: Sec Schl (6-7) | 7 |
|  | 465 | Elective Student Teaching (3 or 5) | 5 |
| TEDU | 195 | Exploring Technology Education | 3 |
|  | 395 | Teaching Technology | 3 |
|  | 396 | Prgrm Plnnng Implemt | 3 |
|  |  |  | 42 crs |
|  |  |  | }{} |

See Professional Education Assessment/Decision Points, p. 389, for additional information. Students must complete TEDU 195, 395, and 396 prior to student teaching.

## CERTIFICATE IN INFANT/TODDLER SPECIALIZATION, 18 credits

(See Certificates on page 21.)

## FAMILY AND CONSUMER SCIENCES: CHILD DEVELOPMENT (FCCD)

400 Internship in Child Development (3-6) Provides the opportunity for the student to work in an internship setting to gain professional experience in child development.

Prerequisite: FCFC 315 or 465 and permission of the department chairperson.

A total of 6 credits may be earned.
Open only to child development students.

## FAMILY AND CONSUMER SCIENCES: CHILD LIFE (FCCL)

400 Internship in Child Life (3-6) Provides internship experience for child life specialist students under the supervision of a child life specialist.

Prerequisite: FCFC 465 and permission of the department chairperson.

A total of 6 credits may be earned.
Open only to child life students.

## FAMILY AND CONSUMER SCIENCES: EDUCATION (FCED)

## 150 Basic Concepts of Secondary Education in Family

 and Consumer Sciences (3) Designed to help students make valid decisions about preparing for and functioning in family and consumer science teaching careers. Professionalism, job requirements, employment opportunities, secondary school curricula, and the role of secondary education within the entire educational process are discussed.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.

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.
490 Practicum in Family and Consumer Sciences
Education (1-3) 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.

492 Implementation of Family and Consumer Sciences Education Programs (3) Emphasizes techniques for implementing vocational education programs, including applications to management, public relations, and professionalism in vocational family and consumer sciences.

Open only to family and consumer science education majors.

493 Coordination of Cooperative Programs in Vocational Education (3) Coordination of class instruction and work experience. Includes recruiting, selecting, and evaluating students; selecting training stations; working with an advisory committee; role of coordinator; techniques and legal concerns of coordination; and placement and follow-up of graduates.

Open only to family and consumer science education majors.

## FAMILY AND CONSUMER SCIENCES: FAMILY AND CHILD (FCFC)

100 Introduction to Family and Child (1) An overview and analysis of the family and child field, including discussion of academic requirements, career opportunities, and ethical standards in each of the three areas: Child Development, Child Life, and Family Studies.

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.

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.

## 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.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.

## 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.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.

## 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: FCFC 265 or 275 or 315.
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.

380 Parenting (3) Research-based parenting practices supporting the positive development of children in diverse families throughout the life cycle.

Prerequisite: FCFC 250 or 315.
393 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.

Not open to teaching majors in family and consumer sciences.

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.

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: FCFC 250.
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.
465 Advanced Child Development in Practice (3) Facultyguided 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: FCFC 265 or 275.
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.

484 Family Stressors and Crises (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: FCFC 250; junior or senior standing or permission of the department chairperson.

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 policymaking process, and critically examine different roles professionals can play in influencing policy development.

Prerequisite or parallel: FCFC 250 or permission of the department chairperson.

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.

496 Seminar in Family Relations (1-3) 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.

## FAMILY AND CONSUMER SCIENCES: FAMILY STUDIES (FCFS)

400 Internship in Family Studies (3-6) Provides the opportunity for the student to work in an established internship setting to gain professional experience in working with families.

Prerequisite: FCFC 250 and 393 and permission of the department chairperson.

A total of 6 credits may be earned.

## FAMILY AND CONSUMER SCIENCES: GENERAL (FCGI)

369 FCS General Internship (3-6) 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.

## FAMILY AND CONSUMER SCIENCES (FCS)

103 Family and Consumer Sciences Body of Knowledge
(3) Introductory course concerning the interdisciplinary nature of family and consumer sciences. Concepts include the profession's common body of knowledge, systems theory, sustainability of the environment, diversity, public policy, critical and creative thinking, professional ethics, and career exploration. Includes 24 hours of mandatory service learning.

Open only to freshmen, sophomores, and juniors or by permission of the department chairperson.

299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Course titles to be announced before each semester.

A total of 6 credits may be earned.
403 Family and Consumer Sciences in Practice (3) Examines the integration of all disciplines in family and consumer sciences to strengthen individuals, families, and communities. Emphasis is on research, public policy, multicultural environments, ethics, and lifelong learning in a global society. Career goals are assessed. Includes immersive learning component. Involves writing.

Prerequisite: FCS 103, senior standing, or by permission of the department chairperson.

## 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.

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.

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.

110 Instructional Technology in the Elementary School
(2) Develops basic skills in the use of instructional technology to support teaching and learning in the elementary school. Includes lab activities outside of class.

125 Survey of Plastics (3) 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.

## 154 Graphic Communication for Interior Design (3)

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.

160 Technical Analysis (3) The computational and presentation skills needed to solve technical problems.

201 Safety and Health Regulations and Compliance (3) 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.

203 Material Processing (3) Industrial materials and processes are studied, including material identification, classification, properties, procurement, processing, use, and disposal. Includes laboratory activities.

204 Energy Processing (3) 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.

210 Engineering Principles (3) 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.

## 213 Interior Construction Materials, Processes, and

 Products (3) Designed specifically for non-majors. Content is organized around specific construction units related to materials, processes, and products of residential and commercial construction.280 3-D Prototyping (3) 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.

299X Experimental/Developmental Topics (3 or 6) Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 credits may be earned.

## 301 Developing and Managing Safety and Health

 Programs (3) 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.
303 Manufacturing Systems (3) 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 systems. Includes laboratory activities.

Prerequisite: TMFG 105 or TCST 106; TEDU 108 or permission of the department chairperson.

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.

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.

369 Cooperative Education in Technology (1-3) 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.
380 Internship in Technology (3) Emphasizes internal or external placement in a technology workplace. Provides opportunities to integrate and apply course content to the workplace. A paid or unpaid work experience for majors in the Department of Technology.

Prerequisite: permission of the work experience coordinator.

A total of 6 credits may be earned, but no more than 3 in any one semester or term.

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.

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.

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.
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: TEDU 403 or TMFG 161.

## 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.

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.

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.

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.

## 290 Career and Technical Student Organizations (3)

Emphasizes the implementation, maintenance, and evaluation of career and technical student organizations.

## 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.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.

305 Technological Systems (3) The study of technological systems involving communication, production, transportation, and bio-technologies. Classroom and laboratory experiences examine the nature of modern systems.

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.

392 Career and Technical Related Class Content (3) A study of the sources of related materials and techniques of developing and using these materials.

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.

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.
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.
403 Technological Enterprise (3) Presents the relationship between technology and the corporate sector. Emphasizes organization, management, operation, and impact of technological enterprises. Laboratory experiences include organizing, staffing, and operating a student-managed enterprise. Includes laboratory activities.

Prerequisite: TEDU 102 or TMFG 105 or TCST 106, TEDU 108.

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.
490 Study in Technology (1-3) Personal or group study of a technology that is not emphasized in other courses.

A total of 3 credits may be earned.

## 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.
## TECHNOLOGY: MANUFACTURING (TMFG)

104 Introduction to Six Sigma (3) Introduces the tenets of Six Sigma and Lean Performance. Uses descriptive statistics (graphical techniques) to develop analytical and problemsolving skills.

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.

## 161 Introduction to Manufacturing Industries (3)

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.

205 Computer-Aided Design (3) Emphasizes modeling and dimensioning. Additional topics include: feature identification and parametric design, dimensioning and modeling with consideration to part relationships, fundamentals of geometric, dimensioning and tolerancing, advanced work with assembly drawings, design of functional gages, and rapid prototyping. A weekly laboratory is scheduled.

Prerequisite: TMFG 105 or equivalent.
Parallel: appropriate 100-level mathematics course.
225 Industrial Plastics (3) Study of industrial plastics processes, materials, and product design. Includes polymer chemistry, processing nomenclature, injection molding, extrusion, extrusion blow molding, compression and transfer molding, thermoforming, and other topics. Weekly laboratory scheduled.

Prerequisite: CHEM 111.
233 Machine Tools (3) Theory and application of production and automated machine tools. Laboratory includes tool design, cutting theory, basic machines, feeds, speeds, precision measurement, NC programming, and safety. Weekly laboratory scheduled.

Prerequisite: MATH 112 or equivalent.
262 Manufacturing Materials (3) 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.

265 Applied Quality Control (3) Emphasis on application of statistics to quality control. Includes hypothesis testing, statistical process control, measurement system analysis, and review of current quality standards.

Prerequisite: MATH 181 or ECON 221, or by permission of the instructor.

## 301 Automation and Computer-Integrated

Manufacturing Systems (3) Comprehensive technical introduction to automation in manufacturing. Includes flow line production, material handling, group technology, and flexible and computer-integrated manufacturing. Weekly laboratory scheduled.

Prerequisite: TMFG 161, MATH 112 or 132 or permission of the department chairperson.
305 Manufacturing Design with CAD (3) Design of tools and fixtures for manufacturing. Includes general purpose workholders, modular and dedicated fixtures, jigs, fixturing principles, degrees of freedom, locating and clamping components, wireframe and solid modeling, and 3-D to 2-D conversion. Students design solid models of fixtures. Weekly laboratory scheduled.

Prerequisite: TMFG 205, 233, 335.
307 Applied Statics (3) Force systems, resultants and equilibrium, trusses, frames, beams, and shear and moments of beams are studied.

Prerequisite: MATH 161.
325 Plastics Product Design (3) Includes plastic materials testing, ASTM standards, mold design and process considerations, material rheology, failure analysis, mold bases, molding problems and solutions, snap fit design, competitive processes, and other selected topics. Weekly laboratory scheduled.

Prerequisite: TMFG 225.
326 Plastic Production Systems (3) Plastics processing with automated production equipment. Emphasizes injection molding, extrusion, and thermoforming. Appropriate applications of process capability, Ishikawa diagrams, control charts, and other process variation identification tools for both process and product analysis. Weekly laboratory scheduled.

Prerequisite: TMFG 325.
327 Advanced Plastics Product Design (3) Emphasizes rheology, additives and their impact on processing and final part characteristics, part design, mold flow, cavity fabrication, cavity material selection, part failure, cooling calculations, and rapid prototyping. Weekly laboratory scheduled.

Prerequisite: TMFG 265, 325.

331 Automated Machines (3) Theory and application of automated machines in the manufacturing environment. Laboratory focuses on the programming and operation of NC machine tools. Weekly laboratory scheduled.

Prerequisite: MATH 112; TMFG 205, 233.
333 Manufacturing Machine Tool Processing (3) Focuses on conditions that influence the control of metal manufacturing processes. Laboratory activities emphasize the significance of locators, power requirements, feeds, speeds, micro-structure, coolants, and other variables. Complex operations are covered on grinding, milling, EDM, and other multifunctional machine tools.

Prerequisite: TMFG 233.
334 Welding and Foundry (3) Flat-position welding with electric and oxyacetylene equipment. Limited work with gas tungsten arc welding (GTAW) and gas metal arc welding (GMAW) equipment. Emphasizes various casting methods, pattern design, sands, gating, cores, furnaces, pouring techniques, and automated foundry practices. Weekly laboratory scheduled.

Prerequisite: TMFG 262.
335 Applied Mechanics (3) Combined statics and strength of materials with applications in manufacturing. Includes design of bolted connections, simple structures, centroids, moments of inertia, and beam design. Weekly laboratory scheduled.

Prerequisite: MATH 161; PHYC 110; TMFG 262.
340 Fluid Power: Hydraulic Systems (3) Fundamentals of hydraulic systems emphasizing applications of Bernoulli's equation. Includes component types and designs, hydraulic circuit analysis, and design of hydraulic systems. Weekly laboratory scheduled.

Prerequisite: TMFG 307 or permission of the department chairperson.

363 Manufacturing Operations (3) Focuses on analyzing product designs and the design, engineering, and operation of industrial production systems through classroom and laboratory activities.

Prerequisite: TEDU 403 or TMFG 105 and 161.
370 AC Circuit Analysis (3) Studies the usage and interaction of discrete electronic components, integrated circuits, and microcontrollers. Weekly laboratory scheduled work includes use of capacitors, diodes, transistors, analog/digital converters, and operational amplifiers.

Prerequisite: TCMP 371.
375 Project Planning and Control (3) Focuses on project planning and control. Students will participate in a simulated lean Six Sigma project. Students will take comprehensive lean Six Sigma black belt certification exams. Students who
pass all the exams will receive lean Six Sigma black belt certificate of proficiency.

Prerequisite: TMFG 425; ISOM 375.
407 Applied Strength of Materials (3) The principles of strength, stiffness, and stability are introduced and applied primarily to mechanical components.

Prerequisite: MATH 162; TMFG 307 or 335.
425 Design of Experiments (3) Includes, but is not limited to, single-factorial, multi-factorial, and fractional ANOVA and Design for Six Sigma.

Prerequisite: TMFG 265.
426 Research and Development in Plastics (3)
Development of research started in TMFG 425. Includes aspects of materials, processing, quality, DOE, materials testing, literature searches/review, and others. Capstone course. Extensive laboratory work required.

Prerequisite: TMFG 340, 425.
460 Projects in Computer-Aided Manufacturing 1 (3) This is the first course of a two-semester sequence of senior capstone. Encompasses the design of product, the selection of raw materials, and the sequence of manufacturing processing techniques. The course emphasizes teamwork, project management, testing through simulation or prototype, and oral and written communications.

Prerequisite: senior standing.
463 Manufacturing Planning and Controls (3) Emphasizes quantitative techniques for manufacturing planning and control. Topics include forecasting techniques, capital equipment justification, production and inventory planning and scheduling (MRP/JIT), and project planning and control (CPM/PERT). Weekly laboratory scheduled.

Prerequisite: MATH 162; TMFG 301.
469 Six Sigma Project 2 (3) A paid or unpaid work and learning experience where students will be required to complete the Six Sigma project started in TMFG 465. Student will be required to prepare a full project report. Student will spend a significant amount of time working with a community partner.

Prerequisite: ISOM 475; permission of the department chairperson.

473 Projects in Computer-Aided Manufacturing 2 (3) This is a continuation of TMFG 460. It includes CNC, CAD, CAM, robotics, and other computer-based technology in manufacturing systems. Extensive laboratory work required.

Prerequisite: TMFG 460.
495 Green Prototyping and Upcycling (3) Students use recycling, 3D printing, and lasers to design environmentally sustainable products.

## SPECIAL EDUCATION

D. McIntosh, Chairperson
bsu.edu/spced
The Department of Special Education prepares teachers to work with students with exceptional needs including those students who are deaf, require mild intervention, 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 hearing impairment, and early childhood special education.

## MAJOR IN APPLIED BEHAVIOR ANALYSIS WITH AN EMPHASIS IN AUTISM (BA/BS), 36 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| EDPS | 270 | Lifespan Development | 3 |
| SPCE | 200 | Exc Children Adults | 3 |
|  | 280 | Beh Analy Prin, Proc, and Phil | 3 |
|  | 290 | Intro Atism Spectrum Disorder | 3 |
|  | 292 | Treatment and Intervention ASD | 3 |
|  | 307 | Ethical, Prof Prac Beh Analy | 3 |
|  | 310 | Application Consultation ABA | 3 |
|  | 315 | Advanced Behavior Analysis | 3 |
|  | 316 | Single Subj Res Design and App | 3 |
|  | 320 | Advanced Interventions for ASD | 3 |
|  | 438 | Advanced Seminar in ABA | 3 |
|  | 483 | Seminar in ASD | 3 |

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 APPLIED BEHAVIOR ANALYSIS, 15 credits

PREFIX NO SHORT TITLE
CREDITS
SPCE 280 Beh Analy Prin, Proc, and Phil
307 Ethical, Prof Prac Beh Analy

310 Application Consultation ABA
315 Advanced Behavior Analysis
316 Single Subj Res Design and App

15 crs

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

PREFIX NO SHORT TITLE CREDITS

| EDPS | 270 | Lifespan Development | 3 |
| :--- | :--- | :--- | :--- |
| SPCE | 200 | Exc Children Adults | 3 |
|  | 290 | Intro Autism Spectrum Disorder | 3 |
|  |  |  |  |
|  | 292 | Treatment and Intervention ASD | 3 |
|  | 320 | Advanced Interventions for ASD | 3 |

15 crs
This program is offered on-line only. Not open to students with a Major in Applied Behavior Analysis.

## MINOR IN EXCEPTIONAL NEEDS: EARLY CHILDHOOD SPECIAL EDUCATION, 15 credits

PREFIX NO

SHORT TITLE

CREDITS

SPCE 210 Thry and Pract in EC Spec Ed 3
215 Assess Yng Chldrn Exc Nds 3
311 Dev Meth Infs and Todds Exc 3
312 Dev Meth PS Chldrn with Exc 3
417 Pract: Inf Tods PS Spec Nds (1-6)

Admission to the Teacher Education Curriculum is waived for this program.

MINOR IN SPECIAL EDUCATION: HEARING-
IMPAIRED, $27-33$ credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| SPAA | 270 | Language Development | 3 |
|  | 343 | Introduction to Audiology | 3 |
|  | 344 | Hearing 2 | 3 |
| SPCE | 201 | Intro Stdnts with Except Nds | 3 |
|  | 240 | Hist Ed Deaf Prsns Psych Dfns | 3 |
|  | 246 | Spch Dev and Deaf or Hard Hrng | 3 |
|  | 454 | Intro to Lang for Deaf Prsns | 3 |
|  | 456 | Lang Meth for Deaf Prsns | 3 |
|  | 458 | Teach Read and Elem Deaf Prsns | 3 |
|  |  |  | 27 crs |

(SNLN 251 and 252 are required for students planning to work in a total communication program for the hearing-impaired.)


Students not meeting the prerequisite for SPCE 458 should see the department chairperson regarding a waiver.

TEACHING MAJOR IN EXCEPTIONAL NEEDS: EARLY CHILDHOOD SPECIAL EDUCATION (BA/BS), 100 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
| AHS | 100 | Introduction to Art | 3 |
| BIO | 102 | Biol Concepts for Teachers | 3 |
| GEOG | 101 | Earth Sea Sky: Geographic View (3) |  |
|  | or |  |  |
| GEOL | 101 | Planet Earth Geol Environment (3) | 3 |
| HIST | 201 | American History, 1492-1876 | 3 |
| MATH | 207 | Mathematics Exceptional Learn | 4 |
| MUSE | 265 | Music Basics for the Classroom | 3 |
| PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3 |
|  |  |  | 22 crs |
|  |  |  |  |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |
|  | 345 | Tests and Measurement | 3 |
| EDRD | 204 | Literature for Children | 3 |
|  | 400 | Tchg of Rdg in Todays Schools | 3 |
| MATH | 430 | Assess Interven Read Lang Arts | 3 |
| SPAA | 292 | Teach Mathematics Disabilities | 3 |
| SPCE | 270 | Language Development | 3 |
|  | 277 | Intro Stdnts with Except Nds | 3 |
|  |  |  | 3 |
|  |  |  | 30 |
|  |  |  | crs Rltn, Collab, \& Diversity |

Mild Interventions (Early and Middle Childhood),
30 credits

| SPCE | 202 | Legal and Proc Founds Spec Ed | 3 |
| :---: | :---: | :--- | :---: |
|  | 266 | Classroom Management | 3 |
|  | 309 | Prin of ABA for Spec Ed | 3 |
|  | 331 | Tech in Special Education (1-3) | 3 |
| 361 | Adv Pract in Special Ed (1-6) | 3 |  |
| 371 | Intro to Mild Intervs | 3 |  |
| 375 | Assessment in Spec Ed Incl Rtl | 3 |  |
| 376 | Tchng Meths Mild Intervs K12 | 3 |  |
| 489 | Stud Teach: Mild Disabilities (1-12) | 6 |  |
|  |  | 30 crs |  |

Early Childhood Special Education, 18 credits
SPCE 210 Thry and Pract in EC Spec Ed 3
215 Assess Yng Chldrn Exc Nds 3
311 Dev Meth Infs and Todds Exc 3
312 Dev Meth PS Chldrn with Exc 3
419 Stu Teach Erly Chld SPCE (1-12) 6
18 crs
100 crs
See Professional Education Assessment/Decision Points, p. 389, for additional information.

## TEACHING MAJOR IN EXCEPTIONAL NEEDS: HEARING IMPAIRED/DEAF (BA/BS), 100 credits

PREFIX NO SHORT TITLE CREDITS

| AHS | 100 | Introduction to Art | 3 |
| :--- | :--- | :--- | :---: |
| BIO | 102 | Biol Concepts for Teachers | 3 |
| GEOG | 101 | Earth Sea Sky: Geographic View (3) |  |
|  | or |  |  |
| GEOL | 101 | Planet Earth Geol Environment (3) | 3 |
| HIST | 201 | American History, 1492-1876 | 3 |
| MATH | 207 | Mathematics Exceptional Learn | 4 |
| MUSE | 265 | Music Basics for the Classroom | 3 |
| PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3 |
|  |  |  | 22 crs |
|  |  |  |  |
|  |  |  | 3 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDPS | 250 | Human Growth Development | 3 |
| EDRD | 400 | Tchg of Rdg in Todays Schools | 3 |
|  | 430 | Assess Interven Read Lang Arts | 3 |
| MATH | 392 | Teach Mathematics Disabilities | 3 |
| SPCE | 201 | Intro Stdnts with Except Nds | 3 |
|  |  |  | 18 crs |

Mild Interventions (Early and Middle Childhood), 30 credits
SPCE 202 Legal and Proc Founds Spec Ed

|  | 266 | Classroom Management | 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 309 | Prin of ABA for Spec Ed | 3 |  |  |  | 30 crs |
|  | 331 | Tech in Special Education (1-3) | 3 |  |  |  |  |
|  | 361 | Adv Pract in Special Ed (1-6) | 3 | Mild Interventions (Early and Middle Childhood), 30 credits |  |  |  |
|  | 371 | Intro to Mild Intervs | 3 |  |  |  |  |  |
|  | 375 | Assessment in Spec Ed Incl Rtl | 3 | SPCE | 202 | Legal and Proc Founds Spec Ed | 3 |
|  | 376 | Tchng Meths Mild Intervs K12 | 3 |  | 266 | Classroom Management | 3 |
|  | 489 | Stud Teach: Mild Disabilities (1-12) | 6 |  | 309 | Prin of ABA for Spec Ed | 3 |
|  |  |  |  |  | 331 | Tech in Special Education (1-3) | 3 |
|  |  |  | 30 crs |  | 361 | Adv Pract in Special Ed (1-6) | 3 |
|  |  |  |  |  | 371 | Intro to Mild Intervs | 3 |
| Hearing Impaired/Deaf (All-Grade), 30 credits |  |  |  |  | 375 | Assessment in Spec Ed Incl Rtl | 3 |
| SNLN | 251 | American Sign Language 1 | 3 |  | 376 | Tchng Meths Mild Intervs K12 | 3 |
|  | 252 | American Sign Language 2 | 3 | 489 |  | Stud Teach: Mild Disabilities (1-12) | ) 6 |
| SPCE | 240 | Hist Ed Deaf Prsns Psych Dfns | 3 |  |  |  |  |
|  | 246 | Spch Dev and Deaf or Hard Hrng | 3 |  |  |  |  | 30 crs |
|  | 248 | Pract Deaf or Hard of Hearing | 3 |  |  |  |  |
|  | 454 | Intro to Lang for Deaf Prsns | 3 | Mild Interventions (Adolescent and Young Adult), 18 credits |  |  |  |
|  | 456 | Lang Meth for Deaf Prsns | 3 |  |  |  |  |
|  | 458 | Teach Read and Elem Deaf Prsns | 3 | SPCE | 361 | Adv Pract in Special Ed (1-6) | 3 |
|  | 466 | Stud Teach: Hearng Impd (1-12) | 6 |  | 475 | Tch Meths in Mild Intervs Adl | 3 |
|  |  |  | $30 \mathrm{crs}$ |  | 476 | Transition Pln for Adol Exc | 3 |
|  |  |  |  |  | 491 | Stud Teach: Sec Mld Int (1-12) | 6 |
|  |  |  |  | Elective: Content Area |  |  | 3 |
|  |  | 100 crs |  |  |  |  |  |
| See Professional Education Assessment/Decision Points, p. 389, for additional information. |  |  |  |  |  |  | 18 crs |
|  |  |  |  |  |  |  | 100 crs |
|  | ING NTER its | AAJOR IN EXCEPTIONAL NEEDS VENTIONS (All-Grade) (BA/BS), |  | $\begin{aligned} & \text { See Prof } \\ & \text { p. } 389 \text {, fo } \end{aligned}$ |  | Education Assessment/Decision Point Edonal information. | ints, |
| PREFIX | NO | SHORT TITLE CR | REDITS | TEACH <br> INTENS |  | AJOR IN EXCEPTIONAL NEEDS ERVENTIONS (BA/BS), 100 credits |  |
| AHS | 100 | Introduction to Art | 3 | PREFIX | NO | SHORT TITLE CR | CREDITS |
| BIO | 102 | Biol Concepts for Teachers | 3 |  |  |  |  |
| GEOG | 101 | Earth Sea Sky: Geographic View (3) |  | AHS | 100 | Introduction to Art | 3 |
|  | or |  |  | BIO | 102 | Biol Concepts for Teachers | 3 |
| GEOL | 101 | Planet Earth Geol Environment (3) | 3 | GEOG | 101 | Earth Sea Sky: Geographic View (3) |  |
| HIST | 201 | American History, 1492-1876 | 3 |  | or |  |  |
| MATH | 207 | Mathematics Exceptional Learn | 4 | GEOL | 101 | Planet Earth Geol Environment (3) | 3 |
| MUSE | 265 | Music Basics for the Classroom | 3 | HIST | 201 | American History, 1492-1876 | 3 |
| PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3 | MATH | 207 | Mathematics Exceptional Learn | 4 |
|  |  |  |  | MUSE | 265 | Music Basics for the Classroom | 3 |
|  |  |  | 22 crs | PHYC | 101 | Phys Sci Concepts for Teachers (1-3) | 3) 3 |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |  |  |  | 22 crs |
| EDPS | 250 | Human Growth Development | 3 |  |  |  |  |
|  | 345 | Tests and Measurement | 3 | EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 |
| EDRD | 204 | Literature for Children | 3 | EDPS | 250 | Human Growth Development | 3 |
|  | 400 | Tchg of Rdg in Todays Schools | 3 |  | 345 | Tests and Measurement | 3 |
|  | 430 | Assess Interven Read Lang Arts | 3 | EDRD | 400 | Tchg of Rdg in Todays Schools | 3 |
| MATH | 392 | Teach Mathematics Disabilities | 3 |  | 430 | Assess Interven Read Lang Arts | 3 |
| SPAA | 270 | Language Development | 3 | MATH | 392 | Teach Mathematics Disabilities | 3 |
| SPCE | 201 | Intro Stdnts with Except Nds | 3 | SPAA | 270 | Language Development | 3 |
|  | 277 | Hum Rltn, Collab, \& Diversity | 3 | SPCE | 201 | Intro Stdnts with Except Nds | 3 |



See Professional Education Assessment/Decision Points, p. 389, for additional information.

## EXCEPTIONAL NEEDS, MILD INTERVENTIONS FOR MIDDLE AND SECONDARY CONTENT AREAS (NON-STAND ALONE LICENSE), 21 credits

| PREFIX | NO | SHORT TITLE | CREDITS |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| EDRD | 320 | Disciplinary Literacy Elem Sch | 3 |
| EDTE | 350 | Curr Integration of Tech | 3 |
| SPCE | 302 | Tch Studs and Dis in Gen Ed | 3 |
|  | 361 | Adv Pract in Special Ed (1-6) | 3 |
|  | 371 | Intro to Mild Intervs | 3 |
|  | 475 | Tch Meths in Midd Intervs Adl | 3 |
|  | 476 | Transition Pln for Adol Exc | 3 |
|  |  |  | $\boxed{21} \mathrm{crs}$ |

## CERTIFICATE IN BEHAVIORAL STUDIES, 12 credits (See Certificates on page 21.)

## 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.
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.

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.

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.

## 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.
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.

## 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 $C$.

## 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 201 or 302 with a grade of $C$ or better.

## 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.
240 History of Education of Deaf Persons and Psychology of Deafness (3) Introduces a comprehensive socio-historical and contemporary overview of deaf culture and psychoeducational issues in America and Europe.

## 246 Speech Development for Students who are Deaf or

 Hard of Hearing (3) Historical and current views of teaching speech to the deaf and hard of hearing are studied with emphasis on current methods. Includes the knowledge, foundation, and practical methodology for teaching spoken English. Writing instructional objectives and an Individual Education Plan for spoken English is also included.Prerequisite: SPCE 201, 240.
248 Practicum with Students who are Deaf or Hard of Hearing (3) Includes work with deaf and hard of hearing students from various age ranges. Participants will practice planning, writing, and implementing relevant instructional objectives.

Prerequisite: SPCE 246; permission of the department chairperson.

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.
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.
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.

## 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.
## 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.
299X Experimental/Developmental Topics (3-6) Topics relevant to the discipline. Topics will be announced before each semester.

A total of 6 credits may be earned.
300 Independent Study (1-6) 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.
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.

## 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 or parallel: SPCE 280 or concurrent enrollment.

## 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.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.
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.

## 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.

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.

## 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 .

## 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.
331 Technology in Special Education (1-3) 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. To be taken concurrently with SPCE 201 for 1 credit or SPCE 361 for two credits.

Parallel: SPCE 201 or 361.
A total of 3 credits may be earned.

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.

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.

## 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 the department chairperson.

361 Advanced Practicum in Special Education (1-6) 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.
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.

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.

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 socialemotional 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 gradepoint average; grades of $C$ or better in SPCE 201 (SPCE 302 for elementary education and secondary content area program) and 202.

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.

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.

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 multi-disciplinary 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.

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.

## 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 gradepoint average; grades of $C$ or better in SPCE 201 (SPCE 302 for elementary education and secondary content area program) and 202.

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.
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.

## 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.

## 417 Practicum: Infants/Toddlers and Preschoolers with

 Special Needs (1-6) 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.

## 419 Student Teaching: Early Childhood Special

Education (1-12) 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.

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 boardcertified assistant behavior analyst.

Prerequisite: a grade of $C$ or better in SPCE 315.
454 Introduction to Language for Deaf Persons (3) Philosophy underlying various methods of language will be reviewed. Participants will compare and contrast various aspects of communication strategies. Topics include interactive language, written language, and reading. Prerequisite: SPCE 240.

456 Language Methods for Deaf Persons (3) In-depth view of various approaches to teaching language to deaf children. Emphasizes analyzing language samples taken from deaf children and forming taxonomies from the analysis. Includes writing behavioral objectives in the language areas of form, content, and use for inclusion in Individual Educational Plans.

Prerequisite: SPCE 454.
458 Teaching Reading and Elementary School Subjects to Deaf Persons (3) Explores various approaches to teaching reading and applies them to reading instruction for deaf children. Reviews reading assessment for deaf children as well as reading in the content areas of other school subjects. The writing of behavioral objectives and Individual Education Plans is included.

Prerequisite: EDRD 400; SPCE 454.
466 Student Teaching: Hearing Impaired (1-12) Required pre-service teaching practica for students seeking licensure in special education hearing impaired. Offered credit/no credit only.

Prerequisite: admission to student teaching.
A total of 12 credits may be earned.
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.

## 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.

## 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.

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.
488 Student Teaching: Mildly Mentally Disabled (1-12)
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.
489 Student Teaching: Mild Disabilities (1-12) 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.
491 Student Teaching: Secondary Mild Interventions
(1-12) 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.
492 Student Teaching: Children and Youth with Severe
Disabilities (6-12) 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.

## UNIVERSITY SCHOOLS

## BURRIS LABORATORY SCHOOL

D. Miller, Principal; V. Edwards, Assistant Principal; M. Peo, Assistant Principal
bsu.edu/burris
As a model laboratory school engaged in best-practice research and the preparation of highly effective educators, Burris Laboratory School fosters 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. Burris collaborates with community partners to prepare students for success in an ever-changing world.

## INDIANA ACADEMY FOR SCIENCE, MATHEMATICS, AND HUMANITIES

Vickie Barton, Executive Director

## 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. In addition, approximately 25 local students and 6 international students attend classes through the Academy's non-residential program. 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 Saturday Programs and summer camps (both day and residential) for students from the second grade through high school.

Ball State University is accredited by the Higher Learning Commission, the National Architectural Accrediting Board of the Association of Collegiate Schools of Architecture, 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 educator preparation and licensing programs are accredited by the Indiana Department of Education and the Council for the Accreditation of Educator Preparation (CAEP).

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 concentration is accredited by the Council for Interior Design Accreditation. 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. The program is also accredited by the National Council for Accreditation of Teacher Education/Council for the Accreditation of Educator Preparation (NCATE/CAEP) and the Higher Learning Commission.

The technology and engineering teacher education program is accredited by the CAEP. The construction management major is accredited by the American Council on Construction Education (ACCE).

The doctoral degree in counseling psychology is accredited by the American Psychological Association. The master's in clinical mental health counseling is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The master's degree in rehabilitation counseling is currently accredited by the Council on Rehabilitation Education (CORE); CORE will be merging with CACREP as of July 2017.

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.

The athletic training major in the School of Kinesiology is accredited by the Commission on the Accreditation of Athletic Training Education. The exercise science major is recognized by the National Strength and Conditioning

Association. 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 on Education for 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 (SOPHE) and American Association for Health Education (AAHE) 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 Master of Arts (M.A.) program in speech-language pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. The Doctor of Audiology (Au.D.) program in audiology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association.

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). The accounting programs, undergraduate and master's, are separately accredited by the Accounting Accreditation Committee of 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 College Entrance Examination Board, and the Southern Regional Education Board.

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).

